

Two Docile Bodies, Two Days in Gareno: An Introduction

Dust fills the air above the dirt road leading to the Huaorani community of Gareno, and the interspersed patches of gravel and eroded cement are inconsistent, if not merely incidental, just like the patches of forest visible beyond the ramshackle houses and plots of corn and cacao that line the road. Approaching the entrance to Gareno—about eighty kilometers east of Tena, capital of Napo province—the forest becomes more lush, more consistent, and strikingly towering above the canopy was a blue drilling rig, about four stories high. As the dirt road approached the forest, there was an equally striking checkpoint, with a sign that read “*Alto Identifiquese*” or “Halt Identify Yourself.”

The guard wore a white hard hat and blue overalls with an Ecuadorian flag patch on his shoulder. I initially associated him with Petroecuador, the State oil company, or Petroamazonas, its subsidiary operating in the Ecuadorian Amazon, also known as the *Oriente*. Closer examination of the picture I took of him revealed a logo on his jump suit. He was not a Petroecuador employee, but an employee of the Quito-based company Senapro. Their homepage displays a flame-topped fist, plays a Mission-Impossible-esque theme, and declares “SENAPRO IS PETROLEUM SECURITY” in all capital letters. Petroecuador subcontracts security at a number of its oil concessions to Senapro, including Block 21, within which Gareno is located (Senapro 2012).



Residents of the four Indigenous communities I visited during fieldwork: the Huaorani communities of Gareno and Huentaro, and the Cofán communities of Dureno and Zábalo are profoundly aware of the presence and/or absence of the State and its security apparatus, of the oil complex and its numerous impacts, of infrastructure like healthcare and education. Despite many inter- and intra-community differences, these families similarly struggle to situate themselves within the country's shifting landscapes—geographic, discursive, socioeconomic and political— influenced by its increasing extractivism, resource nationalism, the threat and/or experience of environmental degradation, and national discourses on plurinationality and multiculturalism.

Gone are the days of the

deceptively straightforward [...] oft-repeated story of forest Indians, seduced by worthless trinkets, pressured to accept unwanted and unnecessary goods, turned into indiscriminating consumers forced to sell their labor and produce on a ruthless market, who begin by losing their heads, and end up by losing their autonomy and culture as well. [Hugh Jones quoted in Lu 2007: 593]

The discussions I had with many residents of Cofán and Huaorani communities included nuanced descriptions of the perceived necessities and assets of their communities, of their ecological concerns, and their socioeconomic and political histories and trajectories.

People in each of the four communities located at different proximities to oil exploitation activities, at different points on the spectrum of market integration¹, all expressed similar perceptions of the national government, of the actual and/or potential human and environmental benefits and detriments of oil exploitation. They expressed similar perceptions of national government, of the actual and/or potential human and environmental benefits and detriments of oil exploitation. Regardless of whether a community was along an oil road, within an oil concession, or separated by hours in a canoe from either of these, in each location ecosystem

¹ For more on the concept of market integration see Lu (2007) and Lu & Sorensen (2008).

integrity and degradation, growth and access to subsistence crops and medicinal plants, expanded economic opportunities, and improved access to healthcare and education, were all consistently mentioned among the central concerns of these communities. The people I met did not seem willing to be seduced by trinkets, to be converted into mindless consumers heading towards a loss of autonomy and culture. To some degree or another, each one of these people consciously attempts to navigate increasingly complex political economies and ecologies, continuously (re)created by human and non-human forces. In other words, they were aware of “the production of socio-environments and their co-constitution by many kinds of human and non-human actors” (Robbins 2012: 5).

The story of two young girls, residents of Gareno—Alicia², twelve years old, and Kati, a year younger—exemplifies aspects of the complex relationship between national discourses of development and inclusion, oil exploitation activities, and the costs and benefits of these activities as experienced by residents of Indigenous communities in the *Oriente*. On Monday, July 2nd, Alicia’s concerned older brother, Julio, came to Dr. Flora Lu—my thesis advisor and fieldwork mentor in Huaorani communities—and I and worriedly said, “Alicia is dying,” telling us that she left school to have lunch and fainted soon after getting home. He was clearly distraught and unable to elaborate further on the circumstances. We packed up our first aid kits and ran to their home, saw Alicia unconscious and unresponsive, her mother resignedly cleaning the kitchen as she told us that it had happened before, that Alicia would wake up fine in an hour or so. I went looking for the Petroamazonas doctor who coincidentally visited Gareno that morning to speak to the community health promoter.

² Following standard practice in ethnographic writing, all names other than those of researchers have been replaced with pseudonyms.



Petroamazonas built Gareno's health center, only open on Thursdays. Petroamazonas built the community's electrical infrastructure and runs the diesel generator donated by Perenco, a French oil company that once operated in Block 21. Petroamazonas also built Gareno's only flushing toilet that, like the health center, the generator's housing, and the checkpoint at the entrance to Gareno, is emblazoned with the their logo. Workers from Drilling Overseas Incorporated (DOI), an Ecuadorian company contracted by Petroamazonas to perforate wells in Gareno, often shuttle Huaorani residents to and from Tena, two hours away. In Gareno, more than any other Indigenous community that I visited, oil infrastructure is the most direct and consistent means by which people access market opportunities and social services, widely articulating with and influencing subsistence practices and social networks. Throughout Indigenous communities of the *Oriente*, the oil complex serves as the primary, if not sole connection to the market economy and to social services like education, road-building, and healthcare, services normally provided by municipal, provincial, and national governments. While I was in Gareno, Petroamazonas employees were building new schoolrooms. One little girl happily showed me her backpack, also bearing the oil company's logo.

When Alicia fainted in Gareno, the community health promoter—Apaika, a mother of six who owns the house where we were staying—was in Tena, running errands. Alicia’s cousins, her teacher, and other residents of Gareno gathered at the girl’s home, reiterated the fact that she had fainted before and speculated as to the cause, offering explanations that ranged from anemia to poor circulation due to tight jeans. Unable to find the Petroamazonas doctor, I could only watch as Dr. Lu held a wet cloth to Alicia’s head and dabbed menthol oil on her upper lip. Full of a humbling impotence, I considered the fact that if it happened in most parts of the United States or in a well-to-do area of Quito or Guayaquil, in a non-peripheral space among a non-marginalized people, this incident—a child losing consciousness for an unknown reason in the middle of a school day—would have secured an ambulance and stay at the hospital until the ailment was identified and treated. In Gareno, we could only wait for the Petroamazonas doctor to reappear. A similar lack of access to basic infrastructure—to human rights defined the United Nation’s Declaration of Human Rights (UNDHR), rights like healthcare under Article 25, education under Article 26, and environmental integrity fundamental to Indigenous cultural reproduction and cosmovision, arguably protected under Articles 15 and 18 (U.N. 1948)—was perceivable during in each of the Indigenous communities I visited during fieldwork. These inequalities were also perceived and expressed by many of the people I spoke to during formal interviews and informal discussions.

On July 3rd, as Apaika and her two youngest children, Dr. Lu, and I finished an afternoon snack of tuna salad and crackers, I noticed Julio approaching the house where we were eating, and immediately thought of his sister Alicia, thought she had fainted again. He informed us that another little girl, Kati, was missing. Sundown was approaching. She had not been seen since walking to the river early in the afternoon with the intent of bathing and washing pots and pans

with some of her young friends. We all walked to where about fifteen members of the community were gathered in front of Kati's family home. Her mother was clearly worried, pacing, her arms crossed. Her father, attempting to retain an air of stalwart authority, chatted with friends, but constantly scanned the area, and alternated between standing and sitting, responded tersely to all questions. I asked Julio questions about Kati, as Dr. Lu chatted with Apaika, who held her young daughter tightly by the hand.

Suddenly, people began shouting in *Huao Tededo*, the Huaorani language, and we ran to a patch of tall grass in front of the house where everyone was gathered. Kati was lying in the grass, unconscious, and wearing only her underwear, a typical bathing suit for a young Huaorani child. Her parents loudly ordered her to stand up, received no response. Her father grabbed her by the arm, and still no response. Someone felt for a pulse and determined that the girl was alive, simply unresponsive. I asked permission to pick her up, did so and carried her to the nearest dwelling and placed her on a mattress.

Apaika hurriedly felt Kati's forehead, determined she had a high fever and ordered her parents to bring ice from their refrigerator, purchased in part with income from the family's business providing meals to DOI employees. Apaika rubbed the girl's face and body with the ice, held it against her abdomen. Someone called a local manager from DOI, who had likely heard of the previous day's incident. The manager called a private ambulance, which arrived outside the house within an hour. A doctor for the ambulance company confirmed the diagnosis of a high fever as the cause of Kati's blackout. By this time the girl had awoken unnerved by the experience, and was shouting almost hysterically in *Huao Tededo*. The doctor gave her a sedative, gave her parents some instructions regarding her care. Then the ambulance left.

The fact that the health care provided in both cases was sub-par by urban Ecuadorian

and/or U.S. standards was (and is) completely naturalized and accepted, an example of the resignation, docility, and racialized socioeconomic and political stratification propagated by the oil as development model. Scholars and the media have widely addressed the Ecuadorian State's recent history of expanding mineral extraction amidst regular military repression of challenges to such activities, repression consistently mentioned by residents of the *Oriente*. In all of the Indigenous communities I visited, the State and its proxies, the oil companies, were viewed as tenuous allies at best, and at worst, as directly antagonistic.

Indigenous communities' pragmatic acceptance of threatened military incursions to support of oil exploitation fosters their de facto political resignation and docility, when regarding challenges to the oil complex. Referring to Indigenous populations as resigned or docile—by no means intended to characterize them as subservient and/or obsequious victims lacking agency—is merely recognition of the State's practice of violently reiterating the viability of the oil as development model, despite evidence and assertions to the contrary. To expect Alicia, Kati, and their families to accept the multiple risks to life and livelihood associated with protesting against the expanding oil complex—or to insinuate cowardice or lack of commitment to conservation for not doing so—would be an expression of entitlement and privilege worthy of ridicule.

In both cases, the diagnosis and treatment (or lack thereof) of each of these young girls ultimately depended upon the (in)action of people affiliated with the oil complex. The Petroamazonas doctor gave Alicia only a cursory examination as she lay unconscious on the floor of her home, said he would return to check on her later in the day, but never did. As far as I know at the time of writing, Alicia may still be having undiagnosed fainting spells. Kati's fever was immediately treated with ice from a refrigerator purchased at least in part by funds acquired through wage labor for the oil complex. DOI—whose employees regularly attempt to ingratiate

themselves with the Huaorani residents of Gareno—paid for the ambulance and the doctor who attended to Kati. In both cases, public institutions and/or the State were entirely absent, despite the following assertion in Ecuador’s 2008 constitution:

Health is a right guaranteed by the State, [a right] whose realization is linked to the exercise of other rights, among them the right to water, nutrition, education, physical culture, work, social security, healthy environments and others that sustain good living [*buen vivir*]. [Asamblea 2008: 29]

Despite the lack of an overt State presence, Petroecuador, its subsidiary Petroamazonas, and the private companies with which these State-run institutions contract serve as proxies of the State, providing services otherwise unavailable in the Indigenous communities of the *Oriente*. This means that *buen vivir* in Indigenous communities is the de facto responsibility of Petroamazonas. The simultaneous presence and absence of the State in the *Oriente* reinforces the social inequalities derived from the processes of economic development (Etchart 2012: 98). So-called “social compensation” programs by oil companies (like the provision of health care, sewage and electrical infrastructure) in the absence of the State, lead to clientelistic politics that privilege a few beneficiaries and permit oil exploitation activities “at the margins of State regulations” (Etchart 2012: 85).

In academic literature, the impacts of the oil complex in the *Oriente* include territorial circumscription, environmental degradation, continuing socioeconomic and political marginalization, increased market integration and exposure to contamination, decreased biodiversity, and various forms of general sociocultural change, all of which are disproportionately experienced by Indigenous people (Cepek 2008a & 2012; Etchart 2012; Kimmerling 2006a; Lu 2007; Sawyer 2004; Widener 2011). Arguably, the Cofán and Huaorani nationalities have experienced some of the most pronounced effects of the Ecuadorian oil complex, as each nationality primarily resides in two “critically important” (Widener 2011: 48)

petro-provinces: Sucumbíos and Orellana, respectively. In the middle of the Cofán people's ancestral territory lies Lago Agrio: the oil boomtown that grew out of Ecuador's first industrial oil well found in 1967. Lago Agrio is now the site of a large refinery operated by Petroecuador, a refinery which is the eastern extreme of a polemic oil pipeline extending west to another refinery on the Pacific coast from which petroleum and/or derivatives are exported. The Huaorani nationality lives primarily in the province of Orellana, location of Yasuní National Park, where interaction between foreign and domestic oil companies continues to have well-documented ecological and sociocultural effects.

Fieldwork in the *Oriente* reveals “the manner in which history, geopolitics, and social structures collide to mold individual experiences” (Etchart 2012: 27), like those of the girls described above. In fact, the history of both the Cofán and Huaorani nationalities can be described as a dynamic interaction between historic extractive industries, beginning with 16th century colonization and the Spanish search for gold and silver, continuing into the quinine and rubber booms beginning in the late 18th and 19th centuries respectively, and finally the 20th century initiation of industrialized oil exploitation (Dominguez & Gomez 1990; Etchart 2012: 36; Fontaine 2003: 383). This history laid the groundwork for the contemporary political economies and ecologies of Amazonia, especially in Ecuador, where increasing market integration correlated to oil exploitation continues a pattern of “truncated modernity” (Valdivia 2008: 473) that leaves many basic needs of Indigenous people “shamefully unattended” (Etchart 2012: 68).

This thesis focuses on the resources identified by Indigenous youth, resources which arguably function as sources of resilience in the face of the above-described shameful lack of attention manifesting in truncated access to benefits of modernity, which in Ecuador are largely

funded by the oil complex. My fieldwork incorporated Indigenous youth in both Huaorani and Cofán communities, people under the age of thirty, because 1) unlike older generations, youth have little or no experience of life before the above-described broad socioeconomic, political, cultural and ecological change induced by the oil complex; and 2) perceptions by Indigenous youth of symbolic and material resources available to their communities may indicate the trajectory of resource valuation and sociocultural reproduction among Indigenous groups faced with an expanding oil complex and increasing market integration.

This investigation employed two methodologies, one visual—photography—and one linguistic—participatory tenables mapping—in order to ascertain resources with cultural and economic resonance and significance in cross-cultural sample of Indigenous youth living at different levels of market integration. Interviews and data underscore the cultural dynamism of contemporary Indigenous youth, demonstrating their participation in hybrid economies and embodiment of hybrid identities. Although their economies and identities are hybrid in nature, Indigenous populations of the *Oriente* of all ages remain socioeconomically, politically, and geographically marginalized, subject to the same lack of access to basic human rights witnessed in Gareno.

These conditions are another manifestation of the history of internal colonialism or “cheap imperialism” (Varese 2012: 169) in Amazonia, as the oil complex—meaning “the current political economy [and ecology] of the oil industry (Watts 2005: 7)—much like other extractive industries, shapes the political economies and ecologies of the region, delivering the benefits and detriments of the industry in a stratified and localized fashion. In other words, the oil complex in the *Oriente* as currently administered by the Ecuadorian State institutionalizes mechanisms that—through the socioeconomic and political inequalities and environmental degradation

fostered by the oil complex—functions to produce “docile bodies,” in the name of development and progress (Etchart 2012: 25), docile bodies like Alicia lying unconscious on her kitchen floor, like Kati, unconscious as I carried her into a ramshackle zinc-roofed room. These images, burned into my memory, continuously incite consideration of how these conditions are created and perpetuated in the *Oriente* and elsewhere.

Among the dynamic impacts of the oil complex, a constant throughout its history is the disproportionate experience of the industry’s negative externalities and a limited experience of its benefits by the Indigenous residents of Amazonia, especially those living in Orellana and Sucumbíos. Despite being continuously touted as a means of ending “underdevelopment,” the effects of the oil complex in Amazonia have been paradoxical at best, at worst, a form of ecocide and Indigenous ethnocide by attrition. About 188 million barrels of oil were produced in Ecuador in 2012 (Secretaría 2013: 6). Incidents like the one with Alicia and Kati in Gareno continue to occur.

The following interrelated questions drive the methodologies and analysis that comprise this investigation: What are the inter- and intra-cultural similarities and differences in perspectives of the oil complex among contemporary Indigenous people living in the *Oriente*? How do youth perspectives compare to those of older generations, already well-documented in academic literature? What resources important to sociocultural reproduction and basic human rights do these youth perceive as available to them? How, if at all, does market integration correlate to perceptions of the oil complex and/or of available resources? And finally, what trends and trajectories of interaction between Indigenous people and the oil complex in the *Oriente* can be extrapolated from the perceptions of Indigenous youth, in light of the well-documented history of oil exploitation in the region?

In the next section of this thesis, I will provide a brief ethnography germane to the discussion of Indigenous perspectives of the oil complex in the *Oriente*, followed by a review of the literature that provides the theoretical and historic foundations of the analysis put forth throughout this thesis. This leads into a section describing the two research methodologies I developed and piloted during fieldwork, followed by a presentation of findings. A discussion of these findings will follow, referencing the theory and historical context provided in the literature review. This discussion will describe the manner in which fieldwork data substantiates the assertion that the oil complex in the *Oriente*, functioning as a de facto branch of the Ecuadorian State, provides access to certain economic opportunities and facets of national infrastructure desired by Indigenous people, but ultimately fails to provide consistent, secure access to basic human environmental rights, and in fact, threatens many resources critical to sociocultural and ecological reproduction and resilience. The final section will provide concluding remarks, including preliminary responses to the questions posed above.

Controladito: An Ethnography

Writing in my field journal after my first day in the *Oriente*, I reflected on the journey from my Santa Cruz apartment to the banks of the Huentaro River, to the Huaorani community of the same name. I heard the river running, heard countless insects, and was fixated on the notion of distance; initially simply the distance from my home in California and from the capital city of Quito, where I awoke that morning. In the course of a five-hour drive, we descended from Ecuador's Andean capital to the Amazonian basin town of Shell-Mera, whose name derives from the fact that Royal Dutch Shell unsuccessfully explored for petroleum in the region during the first half of the twentieth century, constructing roads leading to colonization and the formation of the small town that, "with its army base and airstrip, displays considerable corporate vigor but still lags far behind the provincial capital," Puyo, in the Amazonian province of Pastaza (Ryder & Brown 2000: 515 & 523).

At the outskirts of Mera a sign above the road reads "Entry Door to Amazonia," a fitting name as many trips into Amazonia depart from the town's *Rio Amazonas* airport, as did mine. After thirty minutes in a duct-tape-patched Cessna, flying over tracts of deforested land, over cattle farms and a distant oil camp, we arrived in Huentaro. Upon landing, my professor, Dr. Flora Lu—whose work in Huaorani communities spans two decades—and I, were greeted by residents of the community. Everyone, the young people especially, looked at me with questioning disbelief, the same way I felt myself looking at the juvenile saki monkey handed to me by Dr. Lu. That sense of dislocation, of disparity—the sense of distance—between novelty and the familiar was vocalized when a few of the young people shared a laugh, wondering why my head was shaved, as I stood wondering silently why the saki monkey was so hairy.

The same young people helped us move our large duffel bags to a platform recently

constructed near the riverbank to accommodate an optimistically anticipated influx of eco-tourists. The eco-tour venture, the platform and flush toilet (for which I, a novice fieldworker, silently expressed thanks) were facilitated and financed by a Quito-based travel agency, not the state, provincial, or municipal governments. Things like electricity, healthcare, education, and general market integration are among the sociocultural markers long-used in demarcating boundaries of the “modern” versus “traditional” binary. This constructed binary reflexively associates interaction with market society to a relinquishing of “traditional” Indigenous culture. In reality, contemporary Indigenous people inhabit complicated and dynamic political, socioeconomic, cultural, and ecological fields, which demonstrate the anachronistic nature of resurgent protectionist arguments, that assert the impossibility of an Indigenous culture’s ability to embrace semblances of the “modern” while retaining integral ties to ancestral cultures.³

To simply dismiss semblances of modernity like healthcare, education, nutritional security, and economic opportunity as antithetical to “true” Indigenous culture and therefore anathema to “real” Indigenous people, very quickly and conveniently facilitates the exclusion of Indigenous people from access to these things, some of which are human rights, all of which were expressed to be important resources by the residents of the four Indigenous communities where my fieldwork took place.

Soon after arriving in Huentaro, I experienced a perfect example of the hybrid nature of contemporary Indigenous culture (and would later experience many more), when in a dilapidated *maloca*—a ancestral-style Huao dwelling—that serves as Huentaro’s communal kitchen and gathering place, I helped cook dinner for about fifteen members of the extended family groups, the *nanicabo*, that constitute Huentaro’s population.

³ For a broader discussion of resurgent protectionist arguments see Wilshusen et al. (2002), Lu Holt (2005: 202), or Fontaine (2010: 46).

A novice fieldworker, during dinner I realized my nearly unconscious application of these binaries— notions of distance between the rural and the urban, the novel and familiar, the modern and the traditional—to my surroundings and the people in the *maloca*, as I became aware of my surprise at the fact that people were, for the most part, enjoying the dinner (Huaorani people like spaghetti with tomato and mortadella sauce? Wow.). Listening to people share jokes in *Huao Tededo*, I realized how privileged I was to be there, to be privy to these intimate family conversations, realized there was so much I did not understand.

In my tent, writing in my field journal after dinner, I imagined similar dinner scenes (with or without spaghetti) having occurred in numerous Indigenous communities throughout the *Oriente*. Multiple distances—geographic, socioeconomic, political, and discursive—separate these communities from Ecuador’s (and the world’s) centers of socioeconomic and political power. “Oil is found in the Amazon; communities of the Amazon are subordinated to the urban centers of Ecuador; and Ecuador is a budding semiperipheral nation in the world system” (Widener 2011: 42). The above-mentioned distances were common in my fieldwork sites, despite the differences in the culture of their residents and the level of market integration in a given community. Despite their many differences, each community and its residents similarly struggle to situate themselves within the country’s changing political ecologies, economies, and geographies, all of which are increasingly affected by Ecuador’s increasing resource nationalism.

Ecuador’s contemporary nationalist movement, burgeoning under the leadership of President Rafael Correa, is considered part of Latin America’s “so-called ‘turn to the Left,’” a shift away from the neo-liberal reforms that were “earnestly embraced” by Latin American governments during the late 20th century, embraced with results considered “ambiguous at best” (Escobar 2010: 2). The Latin American leftward turn has been called 21st century socialism, or

decolonial projects for territorial and cultural autonomy. In the case of Ecuador specifically, it is called *La Revolución Ciudadana*, the Citizens' Revolution, and touted as a shift towards plurinationality, multiculturalism, and environmental stewardship. In its discursive eschewal of neoliberal ideals, the leftward turn in Ecuador and Latin America in general, offers the potential for drastic social and political change. However, throughout Latin America there exists “an acute sense that this potential will not necessarily be realized” that these State projects “are not panaceas of any sort,” but in reality are “fragile and full of tensions and contradictions” (Escobar 2010: 2).

Residents of the Huaorani and Cofán communities where I did my fieldwork repeatedly expressed the fact that the discursive potential of Ecuador's widely touted *Revolución Ciudadana* has had effects that were indeed ambiguous at best, resulting in little de facto growth in the standard of living experienced in Indigenous communities. The stories of Alicia and Kati in Gareno—whose health scares are described in the introduction to this thesis—exemplify the clear distinction between discursive promises of development and assistance for marginalized communities and the actual conditions experienced by their residents. The president of the Cofán community of Dureno succinctly expressed this dissonance, saying, “Organizational realities often do not reflect community realities.”

At the end of my first day in Huentaro where I arrived via Cessna, I wrote in my field journal by the light of an LED headlamp. Huentaro has no electrical infrastructure. I listened timorously for the sound of potentially venomous snakes or spiders. Huentaro has no medical center. Sipping bottled water (Huentaro's residents drink from the river) I once again expressed silent thanks for the recently completed flush toilet for eco-tourists, which was effectively an attempt at privatized development orchestrated by a travel agency, not the government at any

scale, or a government proxy. Huentaro was unique among the four communities I visited in its lack of electrical infrastructure, its limited market-integration due to geographic isolation, its distance from post-primary education (nearly one hour by motorized canoe), and its distance from healthcare (accessible only via hours in a canoe or via Cessna, given an operational radio and favorable weather conditions). Also unique among the four communities is Huentaro's distance from the nearest oil project.

In contrast, Gareno, which is located within a current site of oil exploitation, and the Cofán communities of Dureno and Zábalo, respectively located in former and proposed exploitation sites, all have some degree of electrical infrastructure and direct access to post-primary education. Dureno is a thirty-minute drive from the nearest hospital. According to its residents, Zábalo remains a few hours by canoe away from medical services. Instead, the community receives quarterly visits from doctors and dentists provided by the Ecuadorian Ministry of Health. Huentaro and Zábalo may lack more pronounced infrastructure due to their relatively low populations (about forty and two hundred, respectively), but the fact remains that proximity to oil infrastructure facilitates access to social services and other aspects of the national infrastructure.

The patriarch and de facto political leader of Huentaro mentioned that in a small nearby settlement, a Huao woman was kidnapped and beheaded by Colombian guerrillas who parachuted into Huaorani territory, having done so with logistical support from the Ecuadorian national government. When asked to explain why the Ecuadorian government would participate in such action, he insisted it was meant to scare the Huaorani, to make them consider moving. Legally demarcated Huaorani territory is partially surrounded by Yasuní National Park where significant oil reserves have been found, where many Huao communities live near or within

existing oil concessions.

In May 2012, little more than a month before my visit to Huentaro, Ecuador's largest newspaper reported the deportation of three suspected members of the FARC (*Fuerzas Armadas Revolucionarias de Colombia*) captured in Coca (*El Comercio* 2012). As many Huaorani spend time in Coca, transformation of the tale of this capture via numerous verbal retellings may account for the above-mentioned kidnapping story, which is far from a corroborated fact. Nonetheless, it is important to note that Huentaro's representative to NAWE—*Nacionalidad Waorani de Ecuador*, the national-level Huaorani political organization—perceives the national government as a poor ally at best, and at worst, as directly antagonistic. When analyzing

the role of and dynamics between civil society and the state, it becomes apparent that community organizations [and arguably Indigenous communities and their leadership] are increasingly the agent that defines or redefines in some cases, justice and democracy. [Widener 2011: 41]

The current president of the Cofán community of Zábalo reiterated the notion that the national government is a tenuous ally at best. Born in 1961 in Dureno, he described that at the age of twenty or so, he was one of the founding members of the community of Zábalo—located within the boundaries of Ecuador's Cuyabeno Wildlife Reserve—having moved there because by the early 80s, contamination in and around Dureno had demonstrated “oil's destructive power” via the colonization and ecological degradation that created the Cofán homeland in its contemporary condition: “a patchwork of oil extraction facilities, boom towns, settler farms, and agricultural plantations” (Cepek 2008: 337). Zábalo's president told me the story of how in the early 90s, members of the community of Zábalo conducted an armed raid on a foreign-owned oil platform being erected relatively close to the community, burned it down and gave equipment confiscated from oil company workers to representatives of the Ecuadorian Ministry of the Environment, a story corroborated by Fontaine (2003: 392) and Cepek (2012: 408). After telling

me this, he specified that modern-day attempts to undertake similar action against Petroamazonas would guarantee armed intervention by the state, and likely exclusion from any potential local benefits of oil rents.

The political leaders of both Huentaro and Zábalo described the systems of democracy and justice to which their communities are subjected as systems that prioritize national-scale interests over the local-scale interests of each community's residents. Significant among these local interests is ecological integrity. Arguably, the right to territorial control underlies ecological integrity, which in itself includes "material elements like land, natural resources (forests, minerals, water), landscapes or (spatial) contexts, as well as intangible components like spiritual space, and sacred sites associated with religious and cultural practices (Ortiz-T. 2010: 494). Gareno's representative to NAWA described that a government representative told him that the community may own the trees, the birds, the animals, and the river, "but the oil is for everyone [in Ecuador]." The community leaders mentioned above specified that the socioeconomic and political dynamics that deny their communities territorial autonomy, thereby threatening the ecological integrity required for sociocultural reproduction, are perpetuated through a perceived and/or implied threat of military force. Referencing Petroecuador and the possibility of its renewed presence in Dureno due to renewed interest in oil exploitation there, my translator quoted the community's vice president who argued, "*Van a venir* [They will come], *hasta a matarnos* [and may even kill us]." Watts underscores the points made by political leadership in each community I visited:

[T]he extent to which oil, and the energy sector generally, has been associated with violence, conflict, and war means that business operations are often conducted in settings [...] in which human rights violations and oil acquisition are inextricably connected. [2005:6]

The second community I visited, Gareno, is populated by Huaorani families who once

lived in Huentaro and Quehueri-Ono, a Huaorani community also along the Shiripuno river, where we stopped for gasoline on the way out of Huentaro. Gareno attracted a growing population throughout the 2000s, due in part to the broad socioeconomic change catalyzed by the increasingly prominent presence of oil companies in the Block 21 concession, where foreign-owned oil companies Oryx and Perenco were eventually supplanted by Petroecuador and Petroamazonas, nearly omnipresent in the *Oriente*, and referred to simply as *la compañía*—the company.

Changes in Huaorani society and territory in response to expanding oil infrastructure are similar to those described by Cepek among the Cofán. Oil exploitation resulted in “the circumscription of land, increasing population density, development of market infrastructure [...] availability of wage labor opportunities [and] changed Huaorani economic patterns and resource use” (Lu Holt 2005: 201). Traveling through Huaorani territory with Dr. Lu, and later independently through Cofán territory, I saw these similarities. Indigenous communities live in the midst of oil exploitation and agricultural projects, and experience similar impacts of these activities: ecological change, changed systems of land tenure, changed intra-communal social networks and practices, increasing levels of socioeconomic and cultural interaction with non-Indigenous *colonos*, with oil company workers, and in some locations, with representatives of local, provincial, and national governments.

Community residents all expressed similar perceptions of the impacts of discourses and practices of oil exploitation, similar perceptions of the actual and/or potential human and environmental impact of oil exploitation, especially the threat of environmental degradation. Descriptions of available resources similarly contained cross-cultural affinities, with people in each community mentioning the importance of healthy forests and rivers, growth of and access

to subsistence crops, medicinal plants, and other natural resources, the importance of access to healthcare, education, and economic opportunities. The fact that my discussions with community residents included nuanced descriptions of the necessities and assets of their communities and their socioeconomic and political history and trajectory suggests that similar political economies, ecologies, and geographies, similar cultural politics, exist among—and are recognized by—Indigenous groups in the *Oriente*. To some degree or another, the people I spoke to made conscious attempts to navigate increasingly complex political economies and ecologies, continuously (re)created by human and non-human forces.

Simply stated, the contemporary *Oriente* is a complicated place. Residents of the region are becoming increasingly market integrated, more “modern,” while maintaining ties to “traditional” culture, effectively demonstrating the invalidity of the essentialist “modern” versus “traditional” dichotomy which abounds in analysis of Indigenous peoples and their ecologies. The third community I visited, Cofán Dureno—once the site of one of Ecuador’s most productive oil wells, “Dureno Uno” (Cepek 2012: 397)—has an electrical grid, extensive sewage systems, access via highway to medical care and post-primary education, and is arguably the most market-integrated of the four communities where I conducted fieldwork. After short bus ride east from the boomtown of Lago Agrio, after crossing the Aguarico River in a fiberglass *Ecocanoa* built in Dureno, leaving behind the community’s entrance at kilometer twenty-three of Ecuador’s trans-Amazonian highway, E45, I could still hear the occasional bus or truck while walking across Dureno’s soccer field.

Consciously demonstrating their experience of cultural dynamism, of the blending of Cofán culture with what they referred to as Western and/or Spanish culture, two young Cofán men who I interviewed chose to dress very distinctly, one wearing his Cofán *ondiccu’je* or tunic,

feather headdress, and necklace of peccary teeth, the other wearing designer clothes imported from Colombia. Part of the “traditional” Cofán clothing for men is a scarf tied around the neck, which in the case of the young man mentioned above, bore the name and iconic face of Che Guevara. Contrastingly, the young man dressed in “modern” clothing also wore a Kichwa beadwork bracelet and necklace. Both of these young men demonstrated the fact that the boundaries between traditional and modern are conceptual at best, and do not reflect actual living conditions or belief systems.

Like the family of the young man who wore his “traditional” clothing, others in Dureno own a set of large speakers that would make a Los Angeles disc jockey jealous. While walking through the community on a sunny Friday afternoon, I heard electronic dubstep from the United Kingdom, heard Colombian *cumbias* and Mexican *rancheras* blaring. One of the people I interviewed, a young Cofán woman, also embodied the hybrid identities of contemporary Indigenous youth as she expressed the desire to become a professional singer, telling me she already sings in different venues in Lago Agrio. Soon afterwards, she expressed the desire to learn to read and write more than simple words and phrases. Extremely proud to call herself “*A’i*” (which in *A’ingae*, the Cofán language, means “people”), when describing a picture of herself wearing the *foño* or hand-sewn skirt that constitutes ancestral dress for Cofán women, the same young woman said she was “dressed like an *A’i*,” phrasing her response in a curiously distancing manner.

The Cofán community of Zábalo, where I spent the most time, and the last site where I conducted field research, seemed to be undergoing significant changes as I was there. Founded in the early 1980s by people fleeing the impacts of oil exploitation in Dureno, a pronounced ecological consciousness has always existed in Zábalo. However, Zábalo’s residents recently

decided to allow Petroamazonas to explore for oil within the community's territorial limits, exploration that, according to more than one member of the community, and also a representative of the Ministry of the Environment, is slated to begin in the near future. Conversations in Zábalo demonstrated that as in industrialized societies, both tension and concordance exists between conservationist forces and the influences of the State and market actors, State and market actors which effectively converge in *la compañía* and its oil as development discourses.

Zábalo exemplifies the tensions inherent to relationships between and Indigenous communities and the oil complex, the intra-communal tensions that such relationships cause, exacerbate, or ameliorate. Some people tersely described the decision to allow oil exploration as unavoidable in the political climate created by Ecuador's expanding resource nationalism. I heard consistent expressions of the importance of maintaining and extracting increasing benefit from the tenable resources available to the community, things like the forest, the animals, the river, the Cofán culture itself, which would undoubtedly be altered, if not threatened or destroyed by oil exploitation activities. A salient example of the interconnectedness of the State and the oil complex, also of the local benefits offered by oil exploitation, I sat in on a community meeting addressing the reinstatement of a project to "recuperate and protect" the local population of *charapas*, a name used for river turtles of two species (Campaña 2009: 2).

For almost twenty years, residents of Zábalo, administered the *charapa* project nearly independently after its initiation with the assistance of the Chicago Field Museum. Community members would collect *charapa* eggs from the wild, care for the eggs and young turtles. Once the turtles reached a certain size, they were released into the wild, with community members receiving payment for each animal released. According to Zábalo's president, the international financial crisis that began in 2008 resulted in a drastic drop in funds received for the *charapa*

project, and its eventual dissolution. As the community of Zábalo has agreed to permit oil exploration in a 1000-2000 hectare section of their territory, Petroamazonas and the Ministry of the Environment have agreed to provide materials and funding in order for the *charapa* project to be reinstated. The fact that State and oil company support of Indigenous communities—development, in other words—is directly linked to oil exploitation in Indigenous communities became very clear during fieldwork, and will be discussed at length in coming sections of this thesis.

The limited economic opportunities in Zábalo, increased somewhat by the *charapa* project, exist within a context of increased local and regional market integration of Indigenous communities in the Cuyabeno Wildlife Reserve, within which Zábalo is located. Playas de Cuyabeno—an Indigenous Kichwa community and territory, located about one hour by motorized canoe up the Aguarico River from Zábalo—recently agreed to allow petroleum exploitation in 40,000 hectares of land. Residents of Zábalo described to me how the community of Playas de Cuyabeno (totaling about 300 adults and children) received fifteen dollars per hectare as compensation, \$600,000, money disbursed directly to the community's adults.

For places like Zábalo and Playas de Cuyabeno with limited and/or nonexistent opportunities for generating monetary income, any economic opportunity, let alone a lump sum payment like those made in Playas, can translate into a significant change in quality of life; the ability to purchase a canoe and/or outboard motor, to (re)construct a home or send a child to school, to purchase much-needed gasoline, healthcare, nutritional security, or tools that may assist in providing these things. Although changes in Ecuadorian laws on community compensation by oil companies may preclude similar direct disbursements in the future, Zábalo demonstrates the pervasiveness of the oil as development model.

Contemporary realities have changed the political ecologies and economies of the region, changed its sociocultural dynamics, redefining many priorities within Indigenous communities in a manner that could be criticized by observers as a betrayal of the ideals of environmental conservation, a demonstration of the inability of Indigenous people to be stewards of the environment. The decision by the community of Zábalo to allow oil exploration within their territory could be met with such criticism. However, such a drastic oversimplification of socioeconomic, political, cultural, and ecological conditions ignores the fact that in the most isolated portions of the *Oriente*, interactions with the oil complex are the de facto means by which much-desired (and deserved) opportunities for market integration and access to infrastructure services such as healthcare, education, and livelihood, integral to human rights. Josiah, my translator in Zábalo, a twenty-four-year-old young man, said “*Ahora vivimos en otro mundo*. [We live in another world now] *Todos necesitamos plata* [We all need money].”

Another young Cofán resident of Zábalo (who speaks perfect English, further demonstrating Indigenous cultural hybridity) mentioned the importance of being able to purchase gasoline, a product of oil exploitation activity in the *Oriente*, a product which the Ecuadorian government subsidizes heavily. He called gasoline, “The most important thing we need,” in that it facilitates travel along the river. Due to illegal trafficking of gasoline and other hydrocarbon fuels across the nearby Colombian border, sales are highly regulated, requiring proof of Ecuadorian residence with state-issued identification and permits, documents which require the financial and logistical ability to travel to cities like Lago Agrio, about four hours and seventy-five dollars in gasoline away from Zábalo. Even the president of Zábalo—also an officer of FEINCE (*Federación Indígena de la Nacionalidad Cofán del Ecuador*) the national-scale Cofán political body—has difficulty buying enough gasoline, diesel, and butane to meet the needs of

Zábalo's residents, one of the most basic of these needs being travel along the Aguarico River, on which both Dureno and Zábalo are located.

River travel facilitates subsistence activities like hunting, fishing, or swidden agriculture, and is necessary for access to market goods, to education, and healthcare. I crossed the Aguarico by motorized canoe every time I visited Dureno, and traveled along the same river to arrive in Zábalo. The importance of clean, navigable waterways in those portions of the *Oriente* isolated from Ecuador's road system cannot be overstated. The English-speaking interviewee who expressed the importance of having gasoline, the importance of a clean river and the means to navigate it, was very much aware of the positive and negative aspects of allowing oil exploration, summing up the dichotomy by saying "I didn't like it [the decision to allow exploration] because they [the oil company] will destroy everything. But the other part, I did like it because of the money."

The oldest person I formally interviewed, a twenty-nine-year-old father of two living Zábalo, who I will call Orlando, also insinuated the many conflicts inherent to permitting oil exploration. He noticed that the presence of *la compañía* upriver in Playas de Cuyabeno resulted in noise pollution, in smoke and the smell of gasoline in the air, but said that in their negotiations with *la compañía*, the Cofán community asserted the need to minimize the impacts of oil exploration. According to Orlando, the Cofán negotiated for limited removal of trees, for care in avoiding pollution of the river, and for narrowing trenches cut through the forest during exploration via reflection seismology. He said the residents of Zábalo were willing to allow exploration, but that "*Nosotros los Cofanes queremos controladito*," which translates roughly to "We the Cofán want it nice and under control."

The residents of Zábalo who I interviewed spoke very clearly about the fact that oil

exploitation has numerous consequences, but that it also offers certain benefits directly related to subsistence, education, and health, to cultural resilience and independence, benefits directly related to dignity and access to basic human rights. To simply label them poor stewards of the environment because they consent to such exploration would ignore the networks of socioeconomic, political, and ecological conditions and interactions, the web of epistemologies and ontologies, that constitute the relationships between the environment, Indigenous communities, the State, and the various market actors with vested interests in the region's hydrocarbon industry.

As my summer research in the *Oriente* came to a close, I had become more mindful of (and somewhat guilty about) having lived nearly the entirety of my life with the privilege of ready access to clean water at any desired temperature, with ready access to reliable electrical, sewage, and transportation infrastructure, ready access to nutritional security, to education, healthcare, and economic opportunity. I had become intimately aware of the fact that these relatively basic needs, these human rights, were yet to be secured by many Indigenous populations of the *Oriente*, let alone consistently provided by an Ecuadorian government acquiring increasing revenues through Amazonia's historically lucrative and embattled petroleum concessions. I had become aware of aspects of the oil complex—the modern political economy and ecology of oil—of the fact that “any tug on the strands of the global web of human-environment linkages reverberates throughout the system as a whole” (Robbins 2012: 13).

As we rode east in a taxi out of Lago Agrio toward the village of Centro Union from which we would depart for Zábalo, the community president quickly answered “*La colonización*” when I asked him to describe the most significant change he has witnessed in his

years of living in Sucumbíos. He described how as a child in Dureno he went with siblings and friends to watch road-building machinery, things they had never seen, carve Ecuador's central Amazonian highway out of what was then unbroken forest.

Contemporary drastic changes continue. The patriarch of Huentaro, described ongoing spills and deceptions by oil companies operating within Huaorani territory. In Gareno, where most of the men in the community work difficult, low-paying jobs for Petroamazonas, I heard stories of spreading alcoholism, suicide, and community conflict largely non-existent before the presence of *la compañía*. In Dureno, the Cofán community close to what has been called “the worst oil contamination on Earth” and an “Amazon Chernobyl” (Amazon Defense Coalition 2009: 3), there is talk of allowing renewed exploitation. The community of Zábalo, founded by people who fled the effects of oil contamination in Dureno, has consented to the initial stages of exploration. Whether labeled colonization or government-sponsored development, dynamic change in Ecuador's *Oriente* has only increased in the nearly fifty years since the discovery of vast oil reserves. These changes have had a clear and disproportionately negative effect on Indigenous residents of the region, providing these residents with certain desired structural and monetary benefits, while threatening local ecologies critical to cultural reproduction.

Recognizing contradictions in the way oil exploitation determines, and is determined by, the socio-ecologies and systems of power in the *Oriente*, and by so doing, denaturalizing said socio-ecologies and power systems, it seems possible to “confound, complicate, and challenge social and environmental practice” surrounding oil exploitation in the region, seems possible to preserve and develop specific, manageable and sustainable ways of making a living (Robbins 2012: 98) while protecting the wealth of cultures and biodiversity in the *Oriente*. Whether this possibility will become actuality is a question far beyond the scope of one summer's worth of

research. When I asked my translator in Zábalo for his individual opinion regarding whether oil exploitation should be allowed in Amazonia, he responded, “*No estoy para decir si o no,*” meaning, “I’m not in the position to say yes or no.” His answer was the best possible response to my simplistic question, a question that, after a summer of fieldwork, seemed inapplicable to the vast web of circumstances and interactions that form the realities of life in the *Oriente* as described to me by its Indigenous residents.

After months of reflection, more productive questions—ones based in recognition of the webs of “entanglements” (Lu & Valdivia 2012) and/or “polyhedrons of intelligibility” (Foucault 1991b: 77) that constitute oil complex in the *Oriente*—may have been: How does oil benefit people and/or nature in the *Oriente*? How can we maximize these benefits? How does oil harm people and/or nature? How, if at all, can we remedy and/or prevent these damages? How, if at all, is it possible to extract oil without causing more of the same damage? Answers to the first four questions, in my opinion, would best be gathered through further ethnographic investigation. Answers to the fifth question have been suggested in this ethnography, and are further explored in the literature review that constitutes the following section.

Literature Review

As I write this on February 20, 2013, Ecuador has just re-elected President Rafael Correa. The Wall Street Journal article describing the re-election begins by saying that it “opens the way for the leader to deepen his populist policies [and] expand oil and mineral extraction,” taking a slightly alarmist tone in reminding readers that Correa has been accused of widely repressing media freedoms (a majority of the article describes this history), and that he dedicated his victory not only to the Ecuadorian people, but to Venezuelan President Hugo Chavez, who due to cancer, has become less vocal in his leftist rhetoric, opening a space for Correa on the hemispheric political stage as Chavez’ heir apparent⁴ (Muñoz & Alvaro 2013:A9).

Despite the almost reflexive association between Correa, Chavez, and a far-left, post-neoliberal, anti-neocolonial, resource nationalistic political rhetoric, scholars assert that the so-called “turn to the left” is by no means a 21st century socialist revolution, and the fact is that “[w]hether these countries [Venezuela and Ecuador, but also Bolivia] are entering a post-neoliberal—let alone, post-liberal—social order remains a matter of debate” (Escobar 2010a:2). At the time of his first election in 2006, national changes instituted by Correa appeared to be patterned after Venezuela’s hydrocarbon-funded shifts in policy: staunch rejection of U.S. hegemony, Ecuador’s integration into the *Alianza Bolivariana para los Pueblos de Nuestra América* or ALBA, and Ecuador’s 2007 re-entrance into OPEC (Widener 2011:267-257). Ecuador and Venezuela are the only Latin American OPEC members.

Upon entering office in 2007, Correa implemented numerous policies that contributed to the editors of the *Latin Business Chronicle* calling him “the angry leftist who runs Ecuador”

⁴ As I was finalizing this literature review, Hugo Chavez died on March 5, 2013, which will undoubtedly alter political calculations in Latin America. Chavez’ death could swing Ecuadorian national politics further to the left, although it also opens the possibility of a political recapture of the Latin America by the right.

(Widener 2011:257). The new president eschewed the neoliberal re-structuring policies that determined the trajectory of Latin American policies since the early 1990s, promising to favor Ecuador's "domestic social debt [...] over the external monetary debt," external debt he asserted was illegal. Responding to extremely high oil prices early in his presidency, Correa re-structured taxes on oil income by foreign companies, appropriating up to 99% of income above the expected monthly average price, an initial step in a process of increasing national control over the oil industry. *El Comercio* quoted Correa in 2008 as saying, "[U]nderstand that the Banana Republic is over. Here conditions will not be set by the companies but by the country." Contracts with foreign oil companies were changed from a production model, to a service provider model, where oil companies were paid a fee for their exploration, extraction, and production services rather than being allowed to market Ecuadorian oil internationally (Widener 2011:257-258).

In the field of international relations, Correa's actions clearly fall into the leftist camp. Within Ecuador however, it has become increasingly clear that "[c]ommunities and ecosystems continue to be threatened, endangered, and ultimately sacrificed" (Widener 2011:259). Following the 2009 World Social Forum, attended by the leftist presidents of Ecuador, Paraguay, Bolivia, Brazil, and Venezuela, where Correa touted the shift away from neoliberalism and the march toward the economic independence of Ecuador, calling Latin America's leftward turn a "magic moment, one of new leaders and governments," an Indigenous leader named Blanca Chancoso denounced the "'nightmare that the Indigenous were living with Correa,' who was undertaking resource extraction 'at all costs'" (Becker 2010:200). In dealing with environmental and social movements which challenge the oil as development model crystallized by his administration, Correa's multiple repressive responses showed that he "pursued [and will pursue] an aggressive and combative policy against his opponents," policy that includes military

repression of anti-oil protest and deployment of national security discourse that labels environmentalist and Indigenous protesters as “terrorists”(Becker 2010:177).

Overall Correa’s discursive alignment with radical leftist movements—such as calling his government *La Revolución Ciudadana* (The Citizens’ Revolution), or dressing in Indigenous clothing, speaking broken Kichwa, or consistently addressing the right of Ecuadorians to *sumak kawsay* (the good life)—are a form of “populist posturing” re-articulating a “long Latin American tradition of appealing to the left” in order to secure an election, followed by the implementation of “policies that favored the traditional oligarchy in order to retain control over the government.” After his participation in creating a new Ecuadorian constitution, his first re-election and inauguration in 2009, the *Latin American Weekly Report* described Correa’s policies as “[m]ore investment in health, education and anti-poverty programmes, certainly [...] But these could simply be defined as social-democratic policies [...] more about style of government than anything else” (Becker 2010:202)

Political Science researcher Simón Pachano, of the *Facultad Latinoamericana de Ciencias Sociales* (FLACSO), a prominent international scholarly institution, asserts that the newly re-elected Correa—an economist with a doctorate from the University of Illinois—“is pragmatic. He has a leftist discourse, but it’s more discourse than reality” (Muñoz & Alvaro 2013:A9). A comment during his most recent re-election speech calls Correa’s pragmatism into question, and reveals the fact that, much as his critics assert, re-election may in fact “embolden him to further concentrate power” (Neuman 2013:A3). From the gleaming presidential palace in Quito’s historic colonial district, Correa shouted to his supporters, “No one will stop our revolution” (Muñoz & Alvaro 2013:A9), “We have never failed you, and we will never fail you” (Neuman 2013:A3).

As we walked back from a short trip into the forest to gather young fronds of chambira palm (*Astrocaryum chambira*) for one of his wives to process into fiber, the political leader of the Huaorani community of Huentaro—geographically, socioeconomically, and discursively distant from Quito’s presidential palace—expressed numerous misgivings about the Correa government, ranging from disregard of his community and the Huaorani nationality in general, to outright deception regarding the potential impacts of oil exploitation, and the use and/or threat of political violence to intimidate Huaorani people living on lands within or near Yasuní National Park (YNP), including two, possibly three subgroups—the Tagaeri, Taromenane, and possibly the Oñamenane—who live in voluntary isolation within the boundaries of YNP, and have a documented history of bellicose interaction with oil company workers and *colonos*, or non-Indigenous colonizers (Martin 2011:24; Proaño García & Colleoni 2008; Finer et. al 2010:64). From the perspective of the above-mentioned leader of Huentaro, and that of other political leaders in the Indigenous communities where I conducted fieldwork—perspectives corroborated by scholarship—the Correa government has failed certain sectors of society, and displays the potential to continue doing so.

(Post)Neoliberal Plurinationalism



At the checkpoint at the entrance to the community of Gareno there is a sign, large and white, bearing a Petroamazonas logo and the name of the checkpoint: “*Control Sumaksacha*.” *Sumaksacha* is Kichwa for “Good forest.” Of the four communities I visited during fieldwork, Gareno is the closest to a functioning oil exploitation site (it *is* an oil exploitation site), and is widely deforested with limited access to clean fresh water, demonstrates visibly low biodiversity, has swidden gardens growing within yards of oil wells. It is clearly not an example of “good forest.” Like the checkpoint outside Gareno, numerous oil blocks, fields, and wells in Ecuador are named using Indigenous languages, some using the Spanish names of rainforest animals, others named after the Indigenous communities where they are located, or after the Indigenous nation associated with the region, names like *Dureno*, *Apaika Nenke*, *Waponi*, *Minta*, *Siona*, *Sábalo*, *Jaguar*, *Mono*, and even *Eden* (Petroecuador 2012b).

Much like the Yasuní-ITT Initiative and the Orwellian nomenclature of oil camps, Ecuador’s 2008 constitution re-articulates and propagates the country’s longstanding the unequal power relationships. Promising trenchant changes in the political economy and ecology of the *Oriente*, the new constitution and its discursive claims to Indigenous and environmental rights effectively function as “new forms of government and new means of binding citizen to state” which bring marginalized people “into a new relation with both the national economy and with the project of government” (Ferguson 2007: 84). The epitome of such new forms of government—the *sumak kawsay* doctrine enshrined in Ecuador’s constitution—is touted as “a new form of coexistence among citizens, in diversity and harmony with nature, in order to reach good living, *sumak kawsay*” (Asamblea 2008: 15). The *Sumak Kawsay* (Kichwa for “Good Life” or “Good Living”) doctrine, called the “orienting concept” of the 2008 Ecuadorian Constitution (Walsh 2010: 18), promises an improvement in living conditions for all of the country’s citizens

“via a new regimen of development that entails improving the quality of life, protecting cultural diversity, promoting participation, and in effect ‘giving rights to nature’” (Pinto 2012: 229).

Sumak kawsay reconceptualizes development under a new framework, where “*buen vivir* [good living] and development are understood as interchangeable.” *Sumak kawsay*, “an ‘interculturalizing’ unprecedented in the country” and Latin America as a whole, asserts that the Ecuadorian population, including its extractive industries, should align their thoughts and actions with “ancestral principles, knowledges, and communities” assuming uniform conceptions of these across socioeconomically, ethnically, and culturally diverse swathes of people (Walsh 2010: 19). Walsh cautions against uncritically embracing the *Sumak Kawsay* doctrine, asserting that, rather than being a shift away from neoliberalism, *Sumak Kawsay* merely re-articulates and re-signifies long-existent (neo)liberal development models based in concepts like individual liberty and agency, willpower, determination, social inclusion, the “humanization” of capitalism, and the co-opting of cultural diversity, with the (un)stated goal of “the continuance of western modern-colonial imposition,” and de-politicizing “social gaps [and] injustices” by identifying them as problems with individual causes and resolutions (2010: 16-17).

In other words, the Huaorani ancestry of Alicia—one of the young women whose health scare was discussed in the introduction—may be honored under *Sumak Kawsay*, but she will be required to pull herself up by her bootstraps to get some medical attention, as would the young women bitten by vampire bats in the Huaorani community of Huentaro while I was there. Neither of the Cofán communities I visited has direct access to healthcare. For Dureno, the nearest hospital is nearly an hour away by road, given reliable transportation. One day after a resident of Zábalo told me that the nearest medical attention was three hours away by canoe, the

fourteen-year-old daughter of my host pointed out a young mother who recently lost a hand following a hunting accident and the long canoe ride to medical attention.

The “good intentions” of the *sumak kawsay* doctrine are “contradicted by executive decrees, secondary legislation, and practices of government,” (Martinez Novo N.d.: 22), arguably making these “good intentions,” regardless of whether they are successful or not, an effective form of governmentality, meaning “the art of government” or

the tactics of government which make possible the continual definition and redefinition of what is within the competence of the state and what is not, the public versus the private [...] thus the state can only be understood in its survival and its limits on the basis of the general tactics of governmentality. [Foucault 1991a: 103]

Succinctly stated, collective notions of global citizenry—in other words, plurinationalism—are projects of governmentality, a means of redefining the competence or reach of the State, and as such often exclude local community concerns, as (re)definitions of ecological integrity, sustainable development, and community autonomy (the discursive foundations of *sumak kawsay*) happen among political and economic elites. Subsequently, “claims on behalf of the local, the community, cultural traditions, innate ecological wisdom, or earth-based spiritual values may in fact be well-crafted political screens” (Di Chiro 2003: 211-212), an assertion readily applicable to Rafael Correa and his government (Becker 2010: 118; Walsh 2010: 16-17; Widener 2011: 259).

“[P]owerful institutions played [and still play] key roles in recognizing, encouraging, and opening the space for certain versions of cultural rights,” centralizing struggles over the scope and meaning of cultural rights, while the actual provision and maintenance of cultural rights (and arguably, human rights) “remains ambiguous and highly contingent” (Hale 2005: 13). The *Oriente*, its Indigenous residents and the ecological integrity upon which their cultural

reproduction is largely-based, are well-documented points of contention in the struggle for cultural and human rights. Despite discursive cultural recognition by the State—via *Sumak Kawsay* and also via acknowledgement of the importance of ecological resources and of Indigenous culture in the naming practices of Petroecuador, its subsidiaries, and the national Secretariat of Hydrocarbons—basic human rights remain, at best, inconsistently accessible to Indigenous communities, and at worst, simply unavailable.

State assertions that development under/as *Sumak Kawsay* ushers in a “new society based in equality, fraternity, solidarity, complementarity, equal access, participation, social control, and responsibility,” a “nature-based mode of development that takes distance from capitalism” (Walsh 2010: 19), simply fall flat when recalling Alicia unconscious on her kitchen floor, or the ecological degradation visible throughout Gareno, the limited reading abilities of children in Cofán Dureno, and the conversation with a Ministry of Health boat-pilot who explained to me that he brings a doctor to Zábalo for one day every three months. Hale asserts that “collective rights, [and I would suggest, cultural recognition under *Sumak Kawsay*] granted as compensatory measures to ‘disadvantaged’ cultural groups, are an integral part of neoliberal ideology” (2005: 12). Articulated differently,

the “development” apparatus [...] is not a machine for eliminating poverty that is incidentally involved with the state bureaucracy; it is a machine for reinforcing and expanding the exercise of bureaucratic state power which incidentally takes “poverty” [or in the case of Ecuador, plurinationalism and *sumak kawsay*] as its point of entry, launching an intervention that may have no effect on the poverty [on the general quality of life or levels of ethnic inclusiveness] but does have other concrete effects. Such a result may be no part of the planners’ intentions—indeed it almost never is—but resultant systems have an intelligibility of their own. [Ferguson 1994: 256]

Whether labeled neoliberalism or post-neoliberalism, or a pursuit of good living and plurinationalism, Ecuador’s model of development funded by oil exploitation is based in the

capitalist mode of production employed by the oil complex worldwide, a mode of production which, in the Americas, originated with colonization, and which is far from being discarded by Ecuador's Citizens' Revolution.

Petro-Political Economy in Ecuador

Fontaine recognizes that contemporary oil exploitation activities are “only an extreme form” of the model of exploitation of Amazonia's resources inaugurated during the Spanish conquest (2003: 383). In light of Fontaine's statement, the trajectory of oil development—a systematic inhibition of the policies, practices, and circumstances of Indigenous political and territorial autonomy—becomes increasingly evident. “Ecuadorian Amazonia is full of histories and testimonies of people affected by petroleum exploitation and the abandonment of the State” (Etchart 2012: 16). In addition to the negative impacts on socioeconomic development, physical wellbeing, and ecological integrity caused by oil exploitation in Ecuadorian Amazonia, the oil complex continues to provoke changes in rights and access to both territory and biological resources, provoke displacement, the proliferation of violence and prostitution, and a “vicious cycle of demands and necessities unmet by the oil companies and the State” (Etchart 2012: 17).

The early twentieth-century Ecuadorian government, “aware of foreign interests and the potential of the Amazon [...] opened large exploration areas to petroleum companies.” By 1948 however, these companies relinquished their concessions as their exploration efforts located only “non-commercial crudes, remote and difficult operating conditions, and unsuccessful drilling.” However, a 1963 discovery of a potentially large oil field in the southern Colombian border province of Putumayo revived interest in oil exploitation in northern Ecuador, inspiring a request for oil concessions by a Texaco and Gulf consortium, the same companies operating in southern

Colombia (Valdivia 2008: 460). The Ecuadorian State awarded 400,000 hectares to the consortium in 1964 (Etchart 2012: 16). In April of 1967, 60km south of the Colombian discoveries, the Texaco-Gulf consortium discovered commercially viable quantities and qualities of crude, and completed the *Oriente*'s first oil well, in what would become the first of many large Amazonian oil fields that continue to produce (Valdivia 2008: 460). In 1992, the Texaco-Gulf consortium ceased to operate in Ecuador, turning over control of oil concessions to the *Corporación Estatal Petrolera Ecuatoriana* (CEPE), a previous incarnation of the current State oil company, Petroecuador (Etchart 2012: 17).

The discovery of oil with marketable qualities, in marketable quantities, transformed Ecuador into a “petro-state” and petroleum into “*the* natural resource to be governed” (Valdivia 2008: 461, emphasis in original). A Colombian migrant and owner of a small restaurant in Lago Agrio who I informally asked about the oil industry there, said simply, “*El petróleo aquí es lo que mueve,*” which roughly translates to “Here, petroleum is what moves everything.” The discovery of oil allowed the Ecuadorian government to finance and therefore “realize a century-old ambition of resettling farmers from the *Sierra* and other parts of Ecuador in the Amazon basin,” an ambition that predates the oil exploitation that now characterizes swathes of the Ecuadorian *Oriente* (Southgate et. al 2009: 23). This National Development Plan, in de facto operation from 1979 to 1984, resulted in the distribution of 634,000 hectares of land among 2,447 families, about half of whom were Native Amazonians, although figures for land distribution by ethnic group are not available (Fontaine 2003: 224). By the beginning of the 1990s, about 36% of Ecuadorian Amazonia had been colonized, with 60,000 to 100,000 hectares being deforested each year. By the same time, 1991, 630,000 hectares were functional oil fields,

while an additional 3 million hectares had been dedicated to oil exploration (Fontaine 2003: 384-386).

Industrialized oil exploitation transformed Ecuador's economy, and at its initiation was "heralded as the salvation of Ecuador's economy, the product that would, at last, pull the nation out of chronic poverty and 'underdevelopment'" at a time when the national economy centered on banana exportation (Kimmerling 2006a: 414-415). According to Petroecuador, oil exploitation yielded \$70 billion between the mid-1960s and 2010. In 2010, the State oil company contributed about \$3.2 billion to the national coffers, about 45% of total State revenue, an increase of 37% since 2005 (Petroecuador 2010: 5). Despite the increasing profitability of oil exploitation in Amazonia, the State oil company claims to have invested only \$59 million in "social compensation" programs in the region between 1995 and 2010, or about 0.08% of the income generated over the span of Ecuador's petroleum industry. Also, although these programs are said to include environmental remediation, "community health and equipping," about \$20 million—slightly over one-third of the total amount of "social compensation" from 1995 to 2010—came in the form of road-building (Petroecuador 2012a), which ultimately benefits the company itself by facilitating movement of its equipment, workers, and products, while additionally facilitating further colonization and deforestation of Amazonia.

Succinctly stated, "[d]omestically, the [oil] industry dominates the national economy" of Ecuador (Kimmerling 2006b: 447), meaning that it dominates the country's (inter)national politics as well. Ecuador's re-integration into OPEC in 2007; its expanding oil-based ties to Venezuela (Fontaine 2010: 233) and Colombia (Leech 2004: 8); the increasing "urbanization" and integration of Amazonia into national discourses, economies, and geographic imaginaries via extractive frontiers (Ryder & Brown 2000): these all demonstrate the significance of Ecuador's

oil complex. Despite its importance to national economies and politics, despite the historically lucrative nature of the industry, in the geographic locus of oil exploitation, the *Oriente*, the fact remains that for local populations the oil complex is inextricably related to a continuum of violence, specifically, structural and ecological violence so long-standing that it is “naturalized and made invisible,” integrated into the terrain of their quotidian experience (Etchart 2012: 20-21).

The Yasuní-ITT Initiative: An Exercise in Environmentalism

Called a “revolutionary initiative” with potential implications throughout tropical areas experiencing socio-environmental conflicts “between resource extraction [...] biodiversity protection,” (Finer et. al 2010: 63) and Indigenous rights at hydrocarbon extraction sites, in 2007 the Ecuadorian government proposed to perpetually forego oil exploitation in a portion of Yasuní National Park (YNP) known by an acronym of the names of the three oil concessions in the region: Ishpingo, Tambococha, and Tiputini. The Yasuní-ITT Initiative, as the proposal is called, would prevent the exploitation of “850 million barrels of heavy crude oil” and prevent the release of “410 million metric tons” of carbon dioxide into the atmosphere, not including that released by deforestation of the region (Finer et. al 2010: 63).

In exchange for not exploiting the ITT concessions, the Ecuadorian government in 2007 (the year Correa took power) initially solicited \$3.5 billion over ten years (half the value of the ITT oil), later shifting their strategy to include Ecuadorian entrance into European carbon credits market which would generate \$6-7 billion, nearly the entire market value of the ITT oil at the time of the proposal’s inception. The revenue from this project would be placed in a trust fund, its interest used to fund “sustainable development projects [...] including protection of the

country's diverse protected area system [...] renewable energy generation, and social programs for Amazonian communities." Additionally, the Ecuadorian government petitioned the United Nations to recognize the "novel concept that not developing fossil fuels should also be recognized as a valid tool to address climate change" (Finer et. al 2010: 64-65). On February 12, 2013, *Día de la Amazonía ecuatoriana*, Ecuadorian Amazon Day, the country's largest newspaper, *El Comercio*, published a brief article saying that the Ecuadorian government is still awaiting \$3.6 billion in compensation for not exploiting the 846 million barrels of oil in the ITT concession (Plaza 2013), suggesting that the question of Ecuadorian participation in the carbon credits market is yet to be resolved, although the oil remains in the ground.

In early August of 2012, after I had returned from the *Oriente* and was luxuriating in Quito's *Hostal Casapaxi*—watching television, washing down fresh-baked bread with cold chocolate milk—I saw a news report which mentioned that, in order to comply with a newly instituted Transparency Law, Petroecuador had begun publishing many internal documents on its website, things such as environmental impact and accounting reports. Flash drive in hand, I walked to the nearest Internet cafe and began exploring. I downloaded numerous maps and pdf files, which seemed as if they could be useful while writing my senior thesis, an event so temporally and geographically distant at the time that I did not consider analysis of those files, or of how I got them. It was nearing noon in Quito, and I looked forward to walking to the restaurant that provided my much-anticipated (almost daily) lunch of grilled chicken, rice, beans, and fried plantains, followed by *guanabana* ice cream nearby.

Upon returning to Santa Cruz, and beginning to write about my summer of fieldwork, I began closely looking at these documents and was reminded of the multi-scalar tensions, the paradoxes, of Ecuador's oil complex. Notions of distance, of separation began to re-emerge: the

distance between national discourses regarding oil development, conservation, and Indigenous rights and the practices of the State oil company; the distance between television reports of Petroecuador's newfound transparency, the isolated corners of their website—accessed through a maze of clicks and searches—that presented the information offering this transparency; the distance between living conditions in the Indigenous communities of the *Oriente* and the living conditions in Ecuador's tourist and economic centers such as Quito.

In Quito's tourist district, where I would have lunch and ice cream or coffee almost every day, the disparity in these conditions—the distance between them—becomes naturalized. In Quito, where Petroecuador is headquartered, the *Oriente* is far away. Amazonia and its inhabitants are not daily, present concerns, but become exoticized objects visible in the windows of travel agencies, in museum pamphlets, in the folk art sold by Indigenous people on the streets. Just before I returned to the U.S., I saw a rotund, middle-aged American woman (easily identified by her blonde hair, her English, and clothing) wearing a t-shirt bearing a picture of a bearded Spanish conquistador with a patch over one eye, likely Francisco de Orellana, who lends his name to numerous geographic features in Ecuador—including one of the provinces where my fieldwork was conducted—and is known as the first European to travel the length of the Amazon River. Surrounding the picture on her shirt was the name of her church group and the phrase, “Expedition 2012. Re-discovering the Amazon.”

Her trip, in many ways similar to the fieldwork I'd just completed, was an exercise in privilege, as was accessing Petroecuador's “transparency” documents, an act requiring both a computer and Internet connection. The documents intended to give transparency to Petroecuador's actions—documents arguably most useful to those most affected by the company's activities, in part, residents of the *Oriente*—were hidden behind the socioeconomic

and technical veil of computers and the Internet, largely unavailable and somewhat unfamiliar in the *Oriente*. What I pulled from the Petroecuador website, much like this woman's shirt, offered a naturalized, sterilized picture of neocolonialism in the Amazon, one considered as appropriate as a nice lunch in the tourist district or a five-day tourist expedition to re-discover Yasuní National Park or the Cuyabeno Faunal Reserve in Ecuador's northeast corner.

The longest document I found, titled simply *El Petróleo en Ecuador*, is introduced as a book containing a "synthesis of events and descriptions destined to facilitate comprehension by teachers and students of the different historic and technical stages of petroleum" in Ecuador, a book written because "teachers are the managers of change, and should therefore have at hand *appropriate information* regarding this non-renewable natural resource" (Petroecuador 2010: 1, emphasis added). Development, including that which is based on extraction of natural resources, is a discursive formation that systematically relates "forms of knowledge to techniques of power" (Escobar 2007: 30). Intended to disseminate "appropriate information" regarding Ecuador's petro-history from the perspective of the national oil company, *El Petróleo en Ecuador*, exemplifies the systematic relationship between the production of knowledge and the propagation of socioeconomic and political power.

Socially constructed conceptualizations of nature reflect socioeconomic and political position, and are manifestations of "capitalist modernity [which] required [and requires] the development of rational forms of management of resources and populations," (Escobar 1999: 6) resources such as petroleum and populations such as teachers, children, and the adults these children become. This management is based on the "expert [or appropriate] knowledge of planners, statisticians, economists, demographers" (Escobar 1999: 6), petroleum geologists, and oil company executives. Such management is an exercise in governmentality, "a quintessentially

modern phenomenon by which increasingly vast domains of daily life are appropriated, processed, and transformed by the expert [appropriate] knowledge and the administrative apparatuses of the State” (Escobar 1999: 6). In the case of *El Petróleo en Ecuador* (hereafter *EPE*), the experts and the apparatus of governmentality consist of the book’s publishers—Petroecuador—and the book itself.

EPE directly addresses the unfolding and importance of the Yasuní-ITT Initiative in terms almost identical to those used by Finan et. al (2010), Martin (2011), and Plaza (2013), mentioning the amount of unexploited oil (846 million barrels), the desire to enter the carbon credits market, reliance on foreign governments and NGOs to fund the initiative, support for the voluntary isolation of the Tagaeri and Taromenane groups, and the idea that the Yasuni-ITT initiative is a “new model of equitable and sustainable development” (Petroecuador 2010: 72-73). However, a close reading of the document, and close analysis of a Petroecuador map—also retrieved from the company’s website—reveals the tensions surrounding the maintenance of the Yasuní-ITT Initiative, reveals that, as in the case of the Correa presidency, very clear contradictions exist between public discourse and the policies/practices of the State and its oil company, demonstrated by the fact that as the Yasuní-ITT Initiative was being formulated, the Correa government was simultaneously “pursuing the licensing procedure to extract the oil from the ITT block [...] in the event the initiative is not funded” (Martin 2011: 27).

Notably, another section of *EPE* discusses the discovery of the Ishpingo, Tambococha, and Tiputini oil fields, the last of which occurred in 1992, estimating the reserves in these fields to surpass one billion barrels, an increase of about 17.6% (Petroecuador 2010: 46-47). According to the Energy Information Administration, the average price for crude oil in 2007 was about \$72 per barrel, while in 2011 (the most recent annual average available) the price was about \$111

(EIA 2013). Assuming a conservative estimate of \$100 per barrel of crude oil, and a conservative estimate of one billion barrels in the ITT, the oil that the Yasuní-ITT Initiative locks into the ground is worth about \$100 billion. Is it realistic to expect the increasingly resource-nationalist Ecuadorian government settle for a mere \$3.5 billion?

Numerous documents suggest that the Ecuadorian State and Petroecuador have already done similar calculations. Despite the public discourse on perpetually foregoing exploitation of the ITT, in its introduction, *EPE* asserts that petroleum is “the major economic good available to the country,” and will continue to be so for the next twenty-five years, a fact “certified by the petroleum reserves of the ITT field” and a number of other oil fields, including thirteen prospective fields in the *Oriente*. The document continues by saying that “petroleum wealth will be much more beneficial for Ecuadorians” if a “politics of compromise” is adopted and action is taken in a timely fashion (Petroecuador 2010: 2). This suggests that oil exploitation in Ecuador follows a model that equates immediacy to maximum benefit, the de facto antithesis of the ethos behind the Yasuní-ITT initiative.

Scholarship and Petroecuador’s internal map verify that the ITT is already an official oil block, number 43 (Finer et. al 2010: 66; Petroecuador 2012b), the latter showing this block to be administered by the Ecuador’s *Secretaría de Hidrocarburos* or Secretariat of Hydrocarbons. The same map shows that ten oil wells already exist within block 43, nine of them within the four identified oil fields within the block. Although these are not likely to be commercially producing wells, the map’s legend does not label them as mere exploratory wells. Also important to note is the fact that this map shows a proposed or actual road and/or pipeline that stretches from the Ecuador/Peru border at the eastern edge of block 43, through another oil field at the block’s northern border with the Cuyabeno Faunal Reserve, ending at a community called Zancudo on

the Aguarico River which serves as a central waterway in the eastern *Oriente*. While I was in Zábalo, about one hour upriver from Zancudo, more than one high-powered boat with dual 75 horsepower outboard motors —indicative of some governmental affiliation according to my translator in Zábalo—zoomed by, heading for Zancudo.

In tandem, *EPE* and the above-mentioned map suggest that the Yasuní-ITT Initiative will not hold, that plans exist to exploit the vast proven oil wealth of the ITT within the next quarter-century, if such exploitation is not already happening surreptitiously. A broader analysis of the same 2012 map, looking at YNP, its “buffer zone” as labeled on the map, the Intangible Zone where the Tagaeri and Taromenani live, and the Cuyabeno Faunal Reserve demonstrates robust oil exploitation within these so-called protected areas. Eighteen distinct oil fields and over sixty wells at different stages of production can be identified in these areas, with a large concentration of those wells located within Huaorani territory bordering the Intangible Zone (Petroecuador 2012b). As I write this, the Ecuadorian government is preparing an auction of thirteen oil blocks, three of which lie on directly on the southern border of YNP—the Curaray River—and another block which is within legally-recognized Huaorani territory (Secretaría 2013: 13). Three proven and inferred oil trends—geographical formations along which oil fields exist or are thought to exist—extend north to south through YNP, including the ITT block (Secretaría 2013: 15). These documents in combination, reaffirm the national government’s continuing consideration of exploitation of oil resources around YNP, and the ITT block, which directly contradicts public discourse around the Yasuní-ITT Initiative.

The conclusions drawn from the above analysis of the Petroecuador and Secretariat of Hydrocarbons documents are corroborated by numerous articles in *El Comercio*, one of which states simply that “Plan B, the one to exploit ITT crude, has always been more advanced than

Plan A, to conserve it, since the very day the [Yasuní-ITT Initiative] was proposed” (Aguirre 2010). This article references a 2010 United Nations Development Program (UNDP) meeting during which Correa rebuffed continued adherence to the Yasuní-ITT Initiative, asserting that conditions on the use of Yasuní-ITT funds should not be placed upon Ecuador, and that the UNDP plan to do so challenged Ecuador’s national sovereignty making the project unfeasible (Aguirre 2010). For all intents and purposes, despite continuing mentions of the Yasuní-ITT Initiative as a lynchpin of Ecuador’s purported conservationist model of government (at the 2012 U.N. conference on climate change, for example), the question of whether ITT crude will be exploited has already been answered.

Rather than a viable plan to conserve biodiversity, prevent carbon emissions, and support the voluntary isolation of the Tagaeri and Taromenane subgroups of the Huaorani nationality, the Yasuní-ITT Initiative is arguably an exercise in governmentality, one intended to secure widespread acknowledgement of the State’s willingness to prioritize environmental conservation and Indigenous rights, an acknowledgement which facilitates consistently expanding resource extractivism. Early in his administration, Correa’s policies included “handouts to the poor [which] did not alter the structures of society,” leading many of his critics to suggest that these “were merely clientelistic ploys designed to shore up his political base of support” (Becker 2010: 118). Although many of the Correa’s government’s “policies paralleled those of social movement activists”—the nationalization of certain extractive projects, calls for land reform, for recognition of multiculturalism—rather than being a government of social movements (those organized around Indigenous rights, conservation, or contamination victims’ rights) the Correa government largely co-opts these movements. Rather than being able to directly contest the State’s policies, integrants of these social movements are then forced to re-define themselves as

part of a political left distinct from that of the contemporary State (Becker 2010: 120). Agrawal suggests that when the views of marginalized groups become “invisible it is because of material constraints and fear of reprisals upon discovery” rather than wholehearted acquiescence, or, conversely because “their consciousness has been incorporated into a hegemonic ideology” (2005: 164).

Numerous scholars recognize that for the Ecuadorian State, especially under Correa, mineral extractivism is the most important, if not the sole, engine of development, and is often characterized as a national security issue by the State, meaning that when Indigenous rights organizations, environmentalists, or victims of contamination challenge the extractivist practices and discourses of the State, they draw sharp discursive and political rebukes, as well as military repression of protests (Becker 2010: 176-177; Etchart 2012: 65; Fontaine 2003: 392; Finer et. al 2010: 64; Valdivia 2008: 465; Widener 2010: 265-266). On my daily walk from *Hostal Casapaxi* to Quito’s tourist district to have lunch, ice cream, and/or use the free Wifi available at the Juan Valdez coffee shop, I would pass anti-Correa graffiti in numerous locations, the most succinct and poetic of which was the simple alliterative phrase “*Correa Corrupto.*” Although the statement reflects displeasure with certain practices of the ruling party, to suggest that Correa’s treatment of the ITT and of oil and/as development is simple corruption elides the entrenched systems of articulation of power, knowledge, and capital within which Ecuador and the Correa government exist.

The environmental degradation that the Yasuní-ITT Initiative promises to prevent on a small scale is the same degradation which it supports on a broad, nationwide scale, the “creative destruction on the land” forming an anthropogenic “second nature” (Harvey 2010: 184-185), what Escobar would call regimes of capitalist nature (1999: 6) and/or techno nature (1999: 11):

in other words, nature as conceived of and/or altered by industry. Writing years before Correa's election, before the Yasuní-ITT Initiative, its publicized dismissal and continuing discursive propagation, Escobar poses a prescient question, which when slightly altered, is particularly germane to the discussion of the Yasuní-ITT Initiative and more broadly, to oil exploitation in Ecuador: "How do we situate ourselves [and how are others situated] in the circuits of power-knowledge (say, in the apparatus of biodiversity production [its protection and/or creative destruction]) that we seek to understand?" (1999: 15).

(Post)Neoliberal Capitalism in the Left-Nationalist Ecuadorian Petro-State

The tongue-in-cheek, overly-complicated title of this section is intended to suggest that analysis of the multi-scalar impacts and trajectory of oil in Ecuador is no simple matter, one much more complicated than simply acknowledging the new Correa government's claims to prioritization of plurinationalism, conservation, and/or (post)neoliberalism, claims that assert the unassailable constitutional enshrinement of concepts of nature, development, and wellbeing that "weave [I]ndigenous *cosmovisión* with global norms from international institutions" (Martin 2011: 27).

The bourgeoisie is perfectly well aware that a new constitution or legislature will not suffice to assure its hegemony; it realises that it has to invent a new technology ensuring the irrigation by effects of power of the whole social body down to its smallest particles. And it was by such means that the bourgeoisie not only made a revolution but succeeded in establishing a social hegemony which it has never relinquished. [Foucault 1980: 156]

"[T]he politics of nature and culture today def[y] easy categorizations" especially when discussing social justice issues in the rainforest—like the *Oriente*—which commonly emphasize four fundamental rights: territory, identity, political autonomy, and alternative epistemologies of development (Escobar 1999: 13-14). These movements inevitably involve Indigenous groups,

the predominant residents of the rainforest, and as such, are “movements of ecological and cultural attachment to a territory” and its ecological integrity, both of which are affected by oil exploitation activities. For Indigenous peoples, “the right to exist is a cultural, political, and ecological question,” and although these groups engage the market out of necessity, they resist “a purely capitalistic valorization of nature” (Escobar 1999: 13).

While walking through the village of Zábalo with my translator Josiah, a twenty-four-year-old young man, he showed me a small plant that resembled a dandelion and told me “*Es como cilantro*” (It’s like cilantro). Despite being laughed at when I was pricked by the nettle-like barbs on some of the more mature leaves, I managed to collect a few of them which I later happily added to the pasta I made for dinner. Josiah, who joined my hosts and I for dinner, saw me relishing the flavor of the plant as I ate, and asked me, rhetorically of course, if I liked it. When I nodded, he said simply that we would get more the next day. However, after a day of interviews, Josiah seemed to have forgotten about getting more of the plant. Planning another dinner of pasta flavored with canned tuna and the cilantro-like plant, I asked him if I could pick more as we walked by another specimen of the same plant near the home of one of his friends. He smiled at my naiveté and said, “You don’t have to buy everything here.”

The following day as we talked about the U.S., I described how in many big cities people spend the day collecting recyclable cans and bottles, earn a few dollars that may buy a single meal, or a single drink. Having been shown a pineapple plant growing in a swidden garden earlier that day—Josiah was amused by the fact that a pineapple plant was a novelty to me—I told him that a large pineapple like that one, grown without chemicals, could cost up to ten dollars in certain markets where I lived. Although I did not mention the fact, I knew that to be about one-fifth of the monthly income he earns from his nightly job of turning on the diesel

generator that powers Zábalo's limited electrical infrastructure, a job which depends on unreliable access to diesel fuel.

Incredulous at the price of the pineapple, Josiah shook his head and said, "No." I nodded, which gave him pause for a moment. He asked, "So over there, if you don't work, you don't eat?" These interactions—and many others I had during fieldwork—demonstrate that although capitalism (or market integration) exists in Indigenous communities of the *Oriente*, it functions as a necessary, intermittently applied instrument, not yet considered an all-encompassing mode of production or lifestyle.

Correa has denounced capitalism "as a vulgar instrument" whose very essence is "exacerbated individualism, deregulation, competition, and so on," denunciations that undergird his leftist macroeconomic policies (Becker 2010: 189). However, "[d]espite appearances, Correa's freedom from [and participation in] imperial control was [and is] not entirely complete" (Becker 2010: 204). Microeconomically, his government's policies have had a clearly disproportionate effect, "significantly" alleviating urban poverty while negligibly affecting rural communities, especially those predominantly inhabited by Afro-Ecuadorians and Indigenous people (Becker 2010: 189). In 2001, after more than three decades of oil exploitation, the poverty rate in Ecuador was 45%, a figure that dropped to 25% by 2006. However provinces of the *Oriente* demonstrate a disproportionately extremely high poverty rate (66.8%) compared to highland and coastal provinces (43.6% and 52.4%, respectively). Cancer rates in oil-producing regions are almost triple the national average (Martin 2011: 24). Oil exploitation in Ecuador has not improved employment rates nor decreased the national debt, and "has resulted in a public health emergency because of its adverse impact on the environment and health," an emergency

which has not been addressed in an effective or comprehensive manner by the Ecuadorian government (San Sebastian & Hurtig 2004: 209).

My interactions with Josiah and other Indigenous residents of the *Oriente* reaffirm the fact that oil exploitation and the distribution of its benefits in Ecuador is by no means a panacea of development. Instead, it often perpetuates the social inequalities and environmental degradation it is purported to alleviate through massive oil rents. The public face of oil exploitation—reflected in Correa’s re-election statement “We have never failed you, and we will never fail you” (Neuman 2013: A3)—is antithetical to the widely recorded effects of the oil industry. How to explain the distance between these discourses? As mentioned above, the Correa government—in power for about six years to-date, and (at least) the next three years—is yet to escape imperial control. It continues to function within the contemporary global mode of production: capitalism, which is not necessarily true in the Indigenous communities of the *Oriente* where oil exploitation is nearly ubiquitous and spreading (Petroecuador 2012b; Secretaría 2013), which threatens the Amazonian character of the country, described in its motto, “*El Ecuador ha sido, es y será país amazónico*,” or “Ecuador has been, is and will be an Amazonian country” (Perreault & Valdivia 2010: 692).

Capitalism is a crisis-ridden system, one in which “the combined power of capitalist production relations and productive forces self-destruct by impairing or destroying rather than reproducing their own [social and material] conditions” (O’Connor 1998: 159). The fact that the Correa government claims to embrace a post-neoliberal, environmentally friendly, and ethnically inclusive ethos does not negate the fact that it participates in global capitalism. Ecuador is an OPEC nation where petroleum is widely considered part of the national patrimony, again, “*the natural resource to be governed*” (Valdivia 2008: 461, emphasis in original). The State relies on

the oil resources of the *Oriente* while participating in the destruction of the social and material conditions that permit oil exploitation. These self-destructing social and material conditions include extraction of a non-renewable resource, unequal distribution of the benefits of oil rents, as well as the structural and political violence that manifests as contamination, widespread illness, and general environmental degradation of the *Oriente*. “Indeed the fact that capitalist actors may be willing to destroy the commons on which they depend and deplete moral resources without which they cannot exist even though they cannot restore them, is a point that has often been made” (Streeck 2010: 11).

It seems nonsensical that the Ecuadorian State relies on oil, would be insolvent without it, and rapaciously continues exploring new avenues for its exploitation, while overlooking the fact that as this non-renewable patrimony is consumed, the Amazonian character of the nation is degraded and its people grow increasingly ill and impoverished. Streeck delineates “a number of *parametric specifications* that characterize the functioning of institutions *in a capitalist political economy in particular*,” or in other words, a preliminary list of “empirical characteristics of capitalism as an institutionalized socio-economic order” (2010: 6-7, emphasis in original).

Among the most salient of these is legitimate greed, or a normalized drive toward “open-ended maximization of material possessions,” demonstrated in Ecuador by the fact that despite the proven hazards of oil exploitation, it continues. As I write this in late February 2012, the Ecuadorian government is preparing to auction off thirteen more oil blocks on the international market, granting twenty-year renewable leases to the highest bidder (Secretaría 2013: 25). The perception of potentially “[l]imitless rewards drive[s] limitless growth, which in turn underwrites limitless rewards” (Streeck 2010: 12). Even in the presence of codified protection for human rights and environmental integrity—like those offered by Ecuador’s 2008 constitution—the

abuse of human environmental rights, “those [rights] that insure basic human survival” and sociocultural reproduction, occurs in the face of economic greed that co-opts and corrupts legal structures (Johnston 2011a: 11-13).

Significant to addressing the consistent oversight—defined as strategically deployed domination and/or disregard⁵—of environmental degradation and adverse health effects caused by oil exploitation in the *Oriente*, another empirical characteristic of capitalism listed by Streeck is institutionalized cynicism. In a capitalist socio-economic order, according to Adam Smith, “the butcher, the brewer, or the baker,” like the contemporary petrochemical executive, do not act out of “benevolence,” and appeals should be made “not to their humanity, but to their self-love [...] their advantages” (Adam Smith 1776, quoted in Streeck 2010: 8). Petroecuador and/or Petroamazonas invest miniscule percentages of their earnings into development in communities in the *Oriente* (Petroecuador 2010, 2012a) not out of benevolence, but in order to propagate the material and social conditions that permit continued oil exploitation, in other words, to underwrite limitless growth.

Another facet of institutionalized cynicism is the fact that actors are not only expected, but rewarded for acting in what Streeck calls “bad faith,” in that minimizing costs by circumventing costly regulations those “avoiding a rule ‘only do what is in their interest’ while not having made the rule watertight is considered its makers’ ‘own fault’” (2010: 8). In other words

actors [...] can only be expected to read rules, as it were, like tax lawyers, i.e. not as normative principles to be adhered to and applied in good will so that their intended meaning is realized as much as possible, but as potential obstacles to the maximization of individual utility, and as a test of an actor’s ability to find innovative ways of overcoming them. [Streeck 2010:8]

⁵ For more on the concept of oversight in environmental politics see Silva (2013).

In the case of the oil complex in Ecuador, the rule maker (the State) is also the rule taker (the State oil company). Extending Streeck's metaphor, this is in effect a delegation of creation and enforcement of tax laws to the tax lawyers. Actors in such a system, whether they are tax lawyers or petrochemical executives, "find themselves encouraged and enabled to proceed on the premise that everything that is not explicitly forbidden [or that which is forbidden by unenforceable laws] is allowed" (Streeck 2010: 11).

In traveling by taxi to and from the small village of Centro Union, about an hour east of Lago Agrio, when departing for and returning from Zábalo, I had the same taxi driver, Fernando, a man in his mid-fifties who spent almost two decades working for an oil contamination remediation company. Happy to explain to me that the names of some of the first oil wells in the area of Tarapoa—Doreen, Fanny, and *Fanny Vieja*—were the names of the romantic conquests of some of the earliest Texaco oil workers, Fernando also gave me a detailed explanation of landfarming, which involves soil removal and microbial decontamination and is the standard means of remediating contaminated soils. Fernando insisted that total remediation is an unachievable feat. The soil is never entirely cleared of contaminants. The contamination in Ecuador is so widespread that landfarming all of it was impossible.

Fernando also told me that he regularly drives for his former employer, the owner of a private environmental remediation company. In traveling throughout the province of Sucumbíos with his former employer, Fernando told me that he regularly saw continuing acts of environmental contamination at Petroecuador and Petroamazonas facilities, oil and production water spills, contaminated waterways and air, identical to the massive contamination at the heart of the *Aguinda vs. Chevron* case widely addressed in scholarship (Kimmerling 2006a, 2006b; Sawyer 2002; Watts 2005). Fernando's assertions were verified by staff at the Ministry of the

Environment in Lago Agrio, who provided me with numerous documents detailing similar damage by both State institutions and subcontracted foreign companies. Fernando and the people at the Ministry in Lago Agrio confirmed the existence of institutionalized cynicism, or the existence of a “*culpability gap*—the distance between governing ideals that protect the basic rights to life and the actual reality of vulnerable and disenfranchised peoples” (Johnston 2011a: 13).

The right to health, a decent existence, work, and occupational safety and health; the right to an adequate standard of living, freedom from hunger, an adequate and wholesome diet, and decent housing; the right to education, culture, equality and nondiscrimination, dignity, and harmonious development of the personality; the right to security of person and of the family; the right to peace; [additionally, security in these rights which are] basic life requirements that all humans are entitled to. [Johnston 1995: 111-112]

These human environmental rights—defined as such because they are recognized as universal rights under the U.N. charter, and because they depend on a “healthy environment” or environmental integrity—are directly challenged by capitalism, broadly speaking, and specifically by the capitalist enterprise of oil exploitation (Johnston 1995: 11). This argument directly links human rights to environmental integrity, an unambiguous connection in light of my fieldwork experience, in light of existing scholarship regarding the oil complex in Ecuador, as well as scholarship on other socio-environmental issues like mining (Sponsel 2011; Gedicks 2011), dams (Turner 2011), water (Bennett 2011; Mehta 2011), and nuclear testing (Barker 2011; Masco 2011), among others.

“[E]nvironmental degradation is not an unfortunate accident under advanced capitalism. It is instead a part of the logic of that economic system [...] a consistent symptom” most clearly evident in the case of oil (Peet et. al 2011: 26). Regardless of discourses on conservation on a community scale or a national one, regardless of codification of the rights of nature, regardless of

the existence of faunal reserves, intangible zones, or national parks, oil exploitation will damage the environment, and that damage is the result of human agency. It is no mere accident. On the first day of the trial over the 2010 British Petroleum (BP) oil spill in the Gulf of Mexico, that “killed 11 workers and dumped millions of barrels of oil into the gulf” (Krauss & Meier 2013)—a spill that poses a “direct threat” to humans and sea life (Solomon & Jansen 2010)—the former president of BP America, Lamar McKay, testified that “The blowout [which caused the spill] was an identified risk, and it was a big risk.” The deepwater drilling project, despite this identified “big risk” was allowed to proceed, according to an emeritus professor of engineering at the University of California, Berkeley, because the BP demonstrates a company “culture of every dollar counts [...] a classic failure of management and leadership” (Krauss & Meier 2013).

Such a culture, which Streeck would call institutionalized cynicism seeking maximization of profit, is in fact not a failure of management, but a relative success of institutional capitalism.

The fact that under capitalism, the premium for a creative discharge of social obligations [such as avoiding threats posed by “big risks”] or for circumventing traditional norms or legal regulations, can be very high is bound to sharpen the innovative intelligence of [those like the presidents of BP and Petroecuador] powerful and well-positioned enough to pursue capitalism’s unlimited opportunities for personal enrichment. It also helps suppress moral scruples [that] may interfere with the rational egoistic maximization of self-interest. [Streeck 2010: 13-14]

This quote mentions an integral and fundamental point of consideration in analyzing the articulation of human environmental rights and institutional capitalism as practiced by the oil complex: morality. Van Liere and Dunlap assert that although consciousness of the fact that environmental degradation has pernicious effects on both humans and ecologies may introduce a moral aspect to socio-environmental decisions, that consciousness is not enough to insure behavior that accords with moral norms (1978: 186). Changes in behavior that might adversely affect the environment requires individual acceptance of “responsibility for their actions and the

resulting consequences” in order for moral norms to influence behavior (Van Liere & Dunlap: 186). However, individuals can deny responsibility by shifting blame to other sources or rationalizing that alternative behaviors are not available (ibid.: 186), or arguably, that alternative behaviors are not as profitable, or that individual and/or collective actions have no negative effects.

For moral norms “to be activated and influence decision-making, both the negative consequences of behavior for humans [and ecologies], as well as awareness of personal responsibility for such behavior must be perceived by individuals” (Van Liere & Dunlap 1978: 187) and arguably, awareness of collective responsibility by institutions such as governments and/or oil companies. In discussing responsibility for the 2010 BP oil spill, Lamar McKay claimed that although “BP was responsible for designing the [faulty] well,” but that contractors were responsible for the cement, for rig construction, and other operations, in a “team effort [...] [and therefore] shared responsibility to manage the safety and risk” (Krauss & Meier 2013). The lack of individual or institutional acceptance of responsibility in the BP spill case reflects the lack of acknowledgement of responsibility (or accountability) for the massive contamination caused throughout the history of the Ecuadorian oil complex.

Since the inception of industrialized oil extraction in 1967, when “[c]ost-cutting practices such as using minimal equipment, outmoded technology, [...] cheap labor” throughout all phases of exploitation—both the upstream (exploration and drilling) and downstream (extraction, transportation, and refinement)—facilities were “deplorable,”: widespread “[h]uge toxic pits [...] chemical muds and industrial solvents [...] sludge and formation waters [...] along with crude [...] regularly dumped” into unlined pits,” all of which were contrary to “standard petroleum practice in the United States” at the current time (Sawyer 2002: 155). The resulting (and still-pending)

lawsuit, *Aguinda vs. Chevron*, was an act of contestation of “the ability of multinational capital to be inculpable” (Sawyer 2002: 172), in other words, unaccountable or irresponsible.

Oil exploitation—arguably more quickly and in a more direct manner than other endeavors of institutionalized capitalism—destroys the social and material conditions required for its perpetuation. This is readily clear in the *Oriente*, beginning with the disastrous history of oil exploitation during the reign of the Texaco-Gulf CEPE consortium of the late twentieth century and continuing into the contemporary expansion of the oil complex funding the Citizens’ Revolution of the resource nationalist Ecuadorian State. Oil exploitation, intended to support and strengthen the State, destroys its required material and social conditions in that it is based on a finite, non-renewable resource which when exploited causes to deforestation, contamination and massive adverse public health effects, decreased biodiversity, and increasingly repressive responses to challenges against the policies of the oil-funded government. These adverse health effects and increasing repression, imbricated with unequal distribution of oil rents, are the most direct social impacts of the socio-environmental issue, the human environmental rights issue, of oil exploitation.

Multiple mechanisms are used to legitimize the abuse of human environmental rights by the oil complex in the *Oriente*—to make “immoral actions socially palatable and legally defensible” (Johnston 1995: 114)—including: 1) the codification and co-option of Indigenous and environmental rights discourses, which is clearly distinct from their de facto implementation; 2) the deployment of Indigenous cultural discourses in conjunction with, or as justification for, the expansion of the oil complex including the institution of oil-contingent development projects; 3) the political economic imbrication of the State and oil companies; 4) the discursive dismissal and militarized repression of challenges to the petro-development model; 5) reliance on a model

of production that is globally implemented; and 6) the public deployment of a conservation agenda by the State, amidst simultaneous private plans to exploit natural resources in areas slated as biodiversity reserves, national parks, or intangible zones.

Institutional employment of the physical, conceptual, and cultural distancing [and (de)legitimizing] mechanisms mentioned above [and others beyond the scope of this literature review] contributes significantly to the inability [and/or unwillingness] of governments to protect basic human rights [to adhere to basic moral norms]. Thus, dysfunctional governance [in a petro-state] is tied to the culture and structure of power as much as it is affected by the constraints resulting from [and the goals inspired by] economic actions [of institutionalized capitalism]. The resulting crises, as illustrated in the [above] case studies, are incredibly complex. [Johnston 1995: 116]

A consistent willingness to risk the health of humans and ecologies distant from profit centers, along with a lack of accountability or responsibility for the consequences of such risk—both of which are cost-cutting, profit-maximizing measures—are not side-effects, but instead integral functions (and chronic symptoms) of the oil complex.

The oil complex is a particular manifestation of the ways in which global [and nationalized] companies conduct business in conjunction with failed [and/or petro-] states, creating conditions in which egregious human rights violations can occur and have occurred [and, without change, will continue to occur]. [Watts 2004: 29]

The consistent business practice of leaving risks and rights violations unacknowledged and/or unremedied—a basic function of the oil complex—leads to the discursive mitigation or denial of the negative effects of oil exploitation. These mitigations or denials of responsibility facilitate the failure to apply moral norms—like human rights law, which includes provisions for ecological integrity—to the socio-environmental issues caused by oil exploitation.

Fernando, the taxi driver and former employee of a remediation company, assured me that contamination continues, describing how he saw pipes exiting a Petroamazonas facility spilling what he thought were formation waters into a stream in rural Sucumbíos. The political

leader and patriarch of Huentaro assured me of the same, telling me a story of going hunting in the vicinity of an oil exploitation project, seeing spilled crude that was waist-deep, seeing animals sink into blackness. It is this blackness that began covering the people and ecologies of the *Oriente* in the late 1960s, that despite the shifting loci of control its spread, advanced unabated throughout different political economic models of the 80s, 90s, and the early twentieth century. It is this blackness that the State seeks to keep producing, that fuels the Citizens' Revolution and claims of bringing good living to all Ecuadorians, including the Indigenous residents of the *Oriente*. How far this blackness will spread, what it will cover, is now the question.

The Integral Role of Indigenous Youth Perspectives in Resource Identification: Two Methodologies

Cultural Heterogeneity and Subjectivity

Academic discussion of Indigenous identity formation processes and their articulations with variously conceived forms of nature is fraught with debate, a debate focused on the interconnectedness and articulations (or lack thereof) between Indigenous culture and the ecologies in which these cultures developed. Some assert the existence of conscious, essential connections between Indigenous people and their ecologies (Cepek 2008b). “Succinctly, essentialism is the belief that things possess an unchanging core, independent of context and interaction with other things” (Escobar 2010b: 92). Others assert that, as essential ecologies no longer exist—that all nature is affected by human behavior and therefore, in some sense, anthropogenic—essential connections to virgin or pristine nature among any population cannot exist (Escobar 1999). Some believe that contemporary Indigenous people cease to become stewards of nature when they are integrated into the market economy, and will avariciously exploit its resources, emulating unsustainable natural resource strategies characteristic of capitalist development (Fontaine 2010: 46-47; Terborgh 2000). Others argue that integration into the market economy is a potential step in incentivizing of conservation due to recognition of resource scarcity (Lu Holt 2005). Broadly speaking, asserting any intrinsic connection between Indigenous culture and nature has been called “American Orientalism” or “occidentalism,” a re-articulation of the tropes of *indigenismo* (Burguete Cal y Mayor 2010; Ramos 2003) which are imbricated with projects of eugenics and whitening in the Americas. These debates suggest the dynamism and complexity that characterizes contemporary Indigenous culture.

Hecht articulates the interrelatedness of cultural dynamism—arguably the opposite of essentialism—and cultural survival in Amazonia, writing that

cultural survival involves [...] significant changes. Regrouped natives had to invent structures that were strong enough to hold fragmenting societies together but flexible enough to permit incorporation of refugees [...] hierarchical structures had to be maintained and reinvented for cultural survival at a regional level.
[Hecht 2006: 502]

Recognizing the mutability of individual and collective identity formation processes in the Indigenous residents of Amazonia as a means of cultural survival, demands recognition of dynamism as a central facet of Amazonian culture. This suggests that like individual identity formation processes, the processes of socio-environmental formation—conceptualizations of nature, its utilities and valuations—are equally mutable.

The meaning of nature, to be sure, has shifted throughout history according to cultural, socioeconomic, and political factors. [...] That nature came to be thought of as separate from people and increasingly produced through labor for instance, is related to the view of ‘man’ brought about by capitalism and modernity.
[Escobar 1999: 1]

The complicated nature of individual and collective identities, as well as socio-environmental conceptualization and valuation processes in the in the context of modernity and globalized capitalism—which permeates social organization to the local scale—reaffirms the fact that Indigenous people are not simple ecologically noble savages, unreflectively “living in harmony with nature” (Lu Holt 2005: 202), nor are they the “intruding wastrel [...] or fallen angels” (Dove 2006: 197) responsible for environmental degradation through inadequate resource management.

[D]issatisfaction with the fate of localized systems of resource use under totalizing systems of modernity stimulated interest in indigeneity and indigenous systems of resource knowledge an management. [In other words] “it takes modern means to become traditional, to be indigenous [...] through the very process of being recognized as ‘indigenous’, these groups enter the realms of modernity.”
[Hornborg 1996 and Hirtz 2003 quoted in Dove 2006: 193]

The mere notion of Indigenous identity, as an essentialized, homogenous, and historically contiguous process of replicating “tradition” and eschewing modernity overlooks the history of the interactions between Indigenous and non-Indigenous cultures—dating back at least 500 years in the Americas—as well as Indigenous appropriation of the tools of modernity as a means of social and cultural reproduction, tools including “romanticized ecological discourses and culturalism [...] as a means of resistance using the master’s tools” (Dove 2006: 194).

The three quotes above and their brief analysis suggests, that Indigenous individual and collective identity formation, socio-environmental conceptualization and valuation are constructions of specific histories, geographies, politics, ecologies, and socioeconomics. This assertion applies within specific Indigenous nations, like the Cofán and Huaorani who were that provided the focus of my fieldwork. It follows that the individuals who constitute these nations necessarily conceptualize their indigeneity and/or their local ecologies in vastly different ways, reflecting their individual histories, socioeconomic positions, and sites of residence.

Randy Borman—a phenotypically “white” man born and raised in the Cofán communities of Dureno and Zábalo, is accepted as a member of the Cofán nationality by sectors of Cofán society. He is the subject of an ethnobiography (Cepek 2012b). His children have been educated in schools in Quito and the United States, He runs an NGO recently awarded a substantial grant by the Macarthur foundation. Randy’s experience is much different from that of Orlando, who I met during fieldwork, a twenty-nine year old single father of two girls. He lives in a small Cofán community, subsists primarily from agriculture, hunting, and limited cash cropping of cocoa. His young children are educated in a small community school and are functionally monolingual in A’ingae. Similarly, the experience of Moi Enomenga—a Huaorani man made famous in the 1990s after an article in the New Yorker Magazine (Kane & Avedon

1994), a visit to Washington funded by the Sierra Club, testimony before the Organization of American States, and his inclusion as a central figure in the 1995 book *Savages* (Kane 1996), all of which contributed to Moi's rise in political and economic stature. Moi's experience is much different from the experience of Alicia, the young girl from Gareno who was introduced earlier in this thesis.

This heterogeneity reveals that any analysis of individual and collective identity formation, of socio-environmental conceptualization and valuation among any culture can only reveal a temporally, spatially, socioeconomically and politically limited representation—a representative snapshot. Dynamic and heterogeneous politics, ecologies, economies, geographies, and demographics observed during brief fieldwork in Huaorani and Cofán communities further underscores this point. Variability in identity, the many factors that contribute to this variability, suggest that direct inquiry into and reporting of subjectivity—meaning socially and culturally mediated individual perspectives and opinions—in ethnography will contribute a great deal to accurately describing processes of cultural and socio-environmental formation and valuation. Such direct inquiry into the “constitution of subjectivity as a complexity of [social] positions [and ecological conditions] and determinations” reveals individual perspectives, and therefore collective identities, to be “without any true and unchanging essence, always open and incomplete” (Escobar 1999: 3).

A Youthful Demographic

In essence, the goal of this investigation is to discuss contemporary Indigenous identity formation processes, and socio-environmental conceptualization and valuation among a younger demographic by investigating the subjective perceptions of members of this demographic,

placing primacy on the endogenous perspectives of young Indigenous people who have lived their entire lives amidst the socioeconomic, political, cultural and ecological dynamism of the *Oriente*. Ethnographic representations of Indigenous people in the *Oriente*, tend to focus on older generations, a tendency exemplified in a discussion of why a particular older Cofán male was chosen as an informant/collaborator:

first, as an elder, he is intimately familiar with the regional transformation of north-eastern Ecuador over the past 40 years; second, as a full-time and long-term [...] resident [of an Indigenous community], he is an active participant in the development and functioning of community conservation practices; and third, his understanding of the politics of conservation is representative of the majority of [...] people, who are only marginally aware of the discourses that circulate as part of the global environmental movement. [Cepek 2008a: 204].

Young people have more ties to the market economy than older people—more aspirations to consume market goods like shotguns and shells, cell phones, sound systems, canoes and outboard motors, chainsaws, generators, gasoline, computers, clothing and other household goods. They are more likely than older generations to define wealth as an ability to acquire market goods, and express a greater desire to strengthen their ties to the market economy than do older generations (Campaña 2009; Vacas 2009). A census among eight Indigenous communities of the *Oriente* shows that only 10% of the population of these communities are over sixty years old (Flora Lu, pers. comm., May 10, 2012), while about 70% of the population of a particular community was under the age of thirty (Campaña 2009: Annex). Demographic investigation of five Indigenous nationalities of the *Oriente*, including the Cofán and Huaorani, revealed that people under the age of fifteen consistently comprise about 50% of the population, that most women marry at the age of fifteen, and fertility levels are relatively high (Lu et al. 2012: 213-214). This data suggests Indigenous populations of the *Oriente* are young and growing, that people under thirty are easily a majority demographic cohort, one that is an increasingly

significant portion of the population.

People under thirty, born after the introduction of the oil complex to the *Oriente* in the mid-1960s, have spent their lives in a socioeconomic, political, ecological, and geographic field very distinct from that inhabited by the elders of their communities. Ethnography among this understudied group with little or no experience of life before the sweeping changes induced by the oil complex, specifically, investigation of the perception and valuation by Indigenous youth of symbolic and material resources available to their communities may indicate trends in, and the trajectory of, individual identities and collective cultural reproduction among Indigenous groups faced with a constantly expanding oil complex and increasing market integration.

A Dilemma and Resilience

Cepek describes a dilemma faced by the Cofán nationality that applies broadly to Indigenous people facing environmental degradation and sociocultural change catalyzed by the oil complex.

If they and their lands look as if they are “too devastated,” they will no longer appear as a distinct people with a perduring culture and a chance at resurgence. If they do not adequately express their loss, however they will have a hard time eliciting essential forms of external support, including financial compensation. Avoiding the pitfalls of quietism, hyperbole, and surrender [...] to articulate their position in a way that expresses both the seriousness of their situation and their realistic hope for surviving it. [Cepek 2012a:410]

Lu (2010) cites Adger (2000) and Folke (2006) who address the concept of the resilience in social and ecological systems, a concept instructive regarding how Indigenous people may walk the “fine line” between being “too devastated” (Cepek 2012a: 410) and not devastated enough, or more specifically, how these groups can find social resilience, “broadly stated [...] the capacity of the [socio-environmental] system to absorb disturbance, withstand shocks, and re-organize so

as to still retain essentially the same function, structure, identity and feedbacks.” Alternatively, social resilience is defined as “the ability of groups to cope with external stresses and disturbances as a result of social, political and environmental change.” The concept “emphasizes the degree to which the system can build and increase the capacity for learning and adaptation, so that not only is there persistence in the face of changes, but innovation and transformation into more desirable configurations” (Lu 2010: 7).

Clear tension exists between the numerous causes of socio-environmental attrition or disorder, and equally numerous sources of resistance and resilience. Very clearly stated, “[i]nhabited landscapes for a number of reasons are informationally ‘noisy’. That is, what these landscapes are in terms of the social forces that create them, and their biotic outcomes [or integrants] often seem stochastic and incoherent” (Hecht 2010: 161). Recognizing the dynamic and integral interactions of ecology and culture among Indigenous communities—the fact that access to, and control over, ancestral land and intact ecologies provides the “primary element” necessary for Indigenous sociocultural reproduction (Ortiz-T. 2010: 494)—this investigation strives to identify the symbolic and material resources perceived by self-identifying Indigenous youth as indicators of the means by which socio-environmental resilience manifests, the means by which it can be encouraged or is challenged.

Discussion of socio-environmental resilience requires discussion of subjective perceptions and valuations of available symbolic and material resources. “[M]uch closer attention to the outcomes of globalization can illuminate a great deal about land cover change in peasant landscapes” (Hecht 2010: 167). Extending this logic, close attention to the diverse effects of globalization on perceived resource availability and valuation, can illuminate a great deal about the processes of socio-environmental change sparked by globalization, which, on a

local level in the *Oriente*, manifests as increased market integration resulting from the ever-expanding oil complex. In the context of constantly shifting socioeconomic, political, cultural, and ecological fields, understanding resource perception and valuation is a critical primary step toward “targeting research and assistance” (Smith et al. 2000), as well as identifying problems.

Resilience, Resources, and Risk

Perceptions of available resources are also an important counterpoint to strictly deficit-based analyses of socio-environmental risks, privations, or threats affecting any marginalized community. Consistent, secure access to desired symbolic and material resources—a foundational criterion of resilience—is arguably the opposite of risk. In the Amazon biosphere and ethnosphere, risks, privations, and threats include expansion of the market economy, of colonization, Amazonian urbanization, extractive industries and resulting environmental degradation including widespread contamination, loss of biodiversity and degraded landscapes.

In a study of perception of environmental risk—closely related to socioeconomic and political risk in Indigenous communities—numerous scholars “suggest that not all ethnic populations perceive, experience, or respond to risks equivalently” (Beehler et al. 2003: 99), underscoring the heterogeneity of risk and resource availability, which in turn suggests the need to focus on subjective interpretations of each of these as a primary step in research intended to discuss resilience in diverse contexts. Smith and colleagues choose risk-mapping, a subjectivist approach, because it “allows the subjects to decide on their own what are the major risks rather than being told to choose from a list that is biased to begin with by the researcher” (Smith et al. 2000: 1947). They developed a ‘participatory risk mapping’ method meant to accurately describe cross-sectional and intertemporal variation in subjects’ risk assessment (Smith et al. 2001: 3-4).

“[O]pportunistically or purposively” selecting participants provides “resulting sample statistics [that] are not statistically unbiased estimates of the corresponding population statistics” (Smith et al. 2000: 1947), meaning that purposefully sampling diverse communities can reveal risk and resource assessments indicative of broader trends. The cross-cultural, market-related, and generationally-specific samples used in this investigation are intended to do just that.

“[R]esearchers, donors, policy-makers, and development practitioners who want to understand and assist specific populations must begin by acknowledging that not everybody is ‘in the same boat’ with regards to the hazards they face” (Smith et al. 2001: 2). Extending the metaphor, focusing on informant/collaborator subjectivity allows researchers to identify the boat in which people place themselves. The nature and subjective severity of risk—and by implication, of available symbolic and material resources—“varies considerably even among what appears to many outsiders a relatively homogeneous population with regard to economy and environment” (Smith et al. 2000: 1951), populations like Indigenous communities. “A basic concept in participatory asset mapping is not to pathologize individuals and their communities as embodying deficiency and abnormality but to strengthen the individual’s and the community’s capacity to take action” (Wang 1999: 190)—stated otherwise, to strengthen the socio-environmental resilience of these communities—by identifying the assets these communities control.

Academic analysis of evaluative practices in the field of education is informative regarding the pernicious effects of such pathologization. Anthropological investigation and education are obviously highly distinct situations. However, in both contexts there exists a dynamic where those who have greater access to policy-making institutions (teachers and researchers) often determine the means by which to evaluate the needs of those with lesser

access to political power (students and informant/collaborators), to the detriment of the latter group. The concept of deficit thinking employed within education discourses suggests the need to transcend a model based solely on risk, which has already been defined as “something undesirable” (Smith et al. 2000: 1946). Deficit thinking is simply defined as “the inclination to view certain groups of students as flawed,” and is well documented in educational literature (Guerra & Nelson 2009: 354). The connection between deficit thinking and a lack of effective special education policy has been proven within educational literature (Guerra & Nelson 2009: 354; Trent et al. 1998). “Risk perception is studied because it is believed to inform decision makers on matters of important [...] policies” (Sjöberg 1999: 546). However, “[o]verreliance on deficit thinking resulted in incompatible policies designed to meet the needs of children” subject to such thinking (Trent et al. 1998: 281). In conjunction, these statements reveal the importance of transcending solely risk-based analysis, which threatens to reify the notions of instability, insecurity, and/or inadequacy that underlie concepts of risk.

Reified pathologization is the essence of deficit-based thinking and analysis. “Because of [...] persistent problems many special education researchers and practitioners began to advocate for a paradigmatic shift that would transcend deficit thinking and promote a more fluid, contextual framework for examining...special education” (Trent et al. 1998: 283). In an institutional ethnography of nascent development projects in Colombia, Escobar asserts the need to avoid “the simple exclusion of voice of the *campesino*,” in discourses of rural development. Describing this exclusion as the “audacity of speaking for others,” Escobar quotes Taussig who stresses the need to “rescue” the voice of the *campesino/a*, acknowledging its integral relevance to policy discussions (2007: 262). Relying solely on risk-based analysis threatens to replicate the epistemological and ontological exclusion of the subalternized voice by filtering this voice

through the lens of pathologization. A discussion of perception and valuation of available resources transcends such pathologization, providing ground for a discussion of resilience. Resilience is intricately connected to the possession of human environmental rights: “those that ensure basic human survival” (Johnston 2011a: 11), ensure sociocultural reproduction.

The Subjective Ethnographer

Just as focusing on the subjectivity of informant/collaborators is critical to research that seeks to effectively identify risks and resources—integral to discussions of resilience—recognizing the subjectivity of the ethnographer is also a critical to effective research, as it determines inclusion and exclusion of aspects of field realities. Ethnographic refusal refers to the “refusal by ethnographers to write thickly about their subjects’ own views” when these views contradict the implied or stated political and/or moral position of the ethnographer.” This phenomenon has been attributed, in part, to a “failure of nerve surrounding questions of the internal politics of dominated groups” which results in “ethnographic thin-ness” (Ortner 1995 quoted in Dove 2006: 202) and reflects “a lack of respect for people’s own understanding of their own motives” (Baviskar 1996 quoted in Dove 2006: 202).

“[K]eeping in mind the centrality of the subjectivity of the researcher to the production of ethnographic knowledge” (Pink 2001:20) seems critical in mitigating, if not entirely eliminating, ethnographic refusal and fostering the thick description characteristic of the most informative ethnographies. Working from a poststructuralist view of ethnography—a view shared in designing this investigation—Pink defines ethnography

as an approach to experiencing, interpreting and representing culture and society that informs and is informed by sets of different disciplinary agendas and theoretical principles. Rather than being a method for the collection of ‘data’, ethnography is a process of creating and representing knowledge (about society,

culture and individuals) that is based on ethnographers' own experiences. It does not claim to produce an objective or 'truthful' account of reality, but should aim to offer versions of ethnographers' experiences of reality that are loyal as possible to the context, negotiations and intersubjectivities through which the knowledge was produced. [2006:18]

This lengthy quote is integral to describing the methodology of this investigation. Conscious recognition of the subjectivity of both the researcher and the informant/ collaborator seems key to overcoming (un)conscious ethnographic refusal or privileging of the ethnographer's gaze or analysis.

In an attempt to recognize, if not mitigate, my perspective as an ethnographer during data collection informant/collaborators were asked to take a set of photographs that show important aspects of their community life. Viewed as a data set, these photographs create a group of representations of the symbolic and material resources perceived by individuals in each of the four communities, representing a sample that is both cross-cultural and includes individuals living at diverse points on the spectrum of market integration. Indigenous youth photographers then described the content and location of each photograph, along with the usage or significance of the pictured resource. Following these descriptions, informant/ collaborators were asked to list the "important things" in their communities, and rank them according to importance using a participatory tenables mapping methodology. Both the visual and verbal methodologies are described in detail in subsequent sections of this thesis.

Literature Review for the Visual Free-Listing Methodology

The debate over Indigenous conceptualizations of identity, culture, nature, and environmental politics reflects certain longstanding power dynamics between Indigenous peoples and exogenous actors including, but not limited to, academics, advocates, and political institutions. These power dynamics can function to mitigate or suppress the subjectivity of Indigenous people (Martinez Novo 2006: 154). The “creation of conservation-based relations with non-indigenous actors is a process of self-determination that is socioculturally grounded, politically astute, and materially productive of [Indigenous] being” (Cepek 2008a: 199). This statement reiterates the need to recognize subjectivity and agency—the latter being “the socioculturally mediated capacity to act” (Ahearn 2001 quoted in Dove 2006: 199)—as these concepts are central to analysis of identity formation processes and their articulation with perception and valuations of environment and culture.

Indigenous people participate in and/or create hybrid or mixed economies (Lu 2007: 601), as well as creating and/or inhabiting hybrid “regimes of nature,” meaning variegated socioeconomically, politically, and culturally constructed ecologies (Escobar 1999: 13). Recognizing individual subjectivity and agency in conceptualizing, valuing, and situating oneself within these hybrid economies and ecologies, this investigation focuses on the perspectives of Indigenous youth as critical toward understanding the way in which the demographic majority in Indigenous communities situates itself within Ecuador’s shifting political economies and ecologies, information which also suggests the trajectory of future Indigenous identity formation processes and conceptualization and valuation of these economies and ecologies.

Anthropological fieldwork as a cultural phenomena is imperfectly separated from the broader impulse to tourism, which, even in the Amazon, certainly predates professional anthropological fieldwork. When one considers the long list of self-styled travelers, explorers, and adventurers who have made this region their destination it

becomes very evident that there is a guiding cultural metaphor of untouched primitiveness that has overhung all accounts of the Amazon since the first description of Orellana's descent of the river in 1540-41. [Whitehead2010: 115]

Recognizing individual subjectivity and agency as a determining factor in the conceptualization and valuation of one's immediate surroundings—also in the formation and application of research questions and methodologies—and seeking a way to build rapport with informant/collaborators, I struggled to find an appropriate methodology that would address all of these concerns while providing with the information in which I was most interested: what do Indigenous youth value and consider important.

A photographic methodology detailed below seemed most suitable, as it gives primacy to the literal perspective of informant/collaborators, while providing them with access to a technology which was in some cases novel, but in all cases less-intrusive and preferable (at least superficially) to an extensive one-on-one interview. The people who lent their perspectives seemed happy to do so when I described the process, and many, especially the younger participants, began eagerly taking pictures immediately after leaving our brief initial meetings.

Playing on the notion that the cultural phenomenon of anthropological fieldwork is “imperfectly separated from the broader impulse to tourism, which, even in the Amazon, certainly predates professional anthropological fieldwork” (Whitehead 2010: 115) is by no means intended as an assertion that field anthropologists are tourists, but instead an assertion of the fact that, like the presence of tourists, the mere presence of an exogenous anthropologist in a socioeconomically, politically, and/or ethnically marginalized community gives rise to stark cultural differences between the anthropologist and community members. Both Vacas (2009: 27) and Conklin (2010: 128-129) describe how Indigenous people recognize that outsiders,

especially *gringos*⁶, inhabit a clearly different socioeconomic, political, and cultural position. Recognizing these disparate power relationships as an ethnographer—similar to the disparate power arrangements that arise via tourism—is integral to conducting fieldwork that remains as “loyal as possible to the context, negotiations and intersubjectivities” elucidated by fieldwork. In essence, subjectivity should be “engaged as a central aspect of ethnographic knowledge” (Pink 2001: 18).

During fieldwork, as during tourism, the visitor and community members alternate between being the observer and the observed. The gaze of the local resident upon the visitor or fieldworker, can often incite reflection on the part of the tourist, or as Gillespie states, “it triggers a moment of repositioning” (2006: 361). The gaze of the informant/collaborator can also provide insight into investigator preconceptions and local realities, providing moments of repositioning, elucidating nuances and complicating interpretations of ethnography.

Using a visual anthropology methodology based on the verbal methodologies developed by H.R. Bernard (2006), this investigation gave primacy to the role of the informant/collaborator as an observer rather than the observed, in order to: (1) gain insight into the dynamic subjectivity of a generation of Indigenous people born after the inception of Ecuador’s oil industry; (2) to highlight the nature of fieldwork as a process cultural exchange rather than simple observation; and (3) to challenge the “tradition in which advocates represent the voice of indigenous people to the larger society [and] grassroots opinions are rarely heard by the majority” (Martinez Novo 2006: 163). The cultural difference between marginalized people and their advocates creates implied (if not actual) epistemic hierarchies privileging cultural concepts “shaped by scholars,

⁶ I am Colombian-American. My phenotype is *mestizo*, meaning I am clearly not Afro-Latino or Indigenous and clearly have some European ancestry. Although these ethnic categories are reified social constructions, I believe it was important to successfully and responsibly conducting fieldwork that I recognized that my appearance (including clothing) and accent would situate me as a clear outsider when I visited an Indigenous community, as it did on the two occasions that I visited an upscale country club.

government officials, or by some other kind of elite” (Martinez Novo 2006: 159).

The subjectivity of the ethnographer determines inclusion and exclusion of aspects of deemed (un)related to the subject of their study, meaning the researcher’s perspective may contain instances of ethnographic refusal. This investigation implemented a photographic methodology intended to minimize my physical presence as the ethnographer⁷ and in order to privilege the literal and figurative perspective of informant/collaborators.

The question remains: why ask people to take pictures? Why not rely on traditional ethnographic tools like observation or variously structured interviews?

Since the Photograph is pure contingency and can be nothing else (it is always *something* that is represented)—contrary to the text which, by the sudden action of a single word can shift a sentence from description to reflection—it immediately yields up those “details” which constitute the very raw material of ethnological knowledge. [Barthes 1982: 28, emphasis in original]

A “photograph may become a reference point through which an informant can represent aspects of his or her reality to an ethnographer” (Pink 2001: 69). Photographs can be “[t]exts that explicitly challenge conventional ‘scientific’ formats because they are constructed in novel ways [...] [and] invite new ways of viewing/reading” (Pink 2001: 127). People’s photographs are “based on a clearly defined and consistent framing of the world” (Pink 2001: 64), meaning they offer a direct glimpse into the photographer’s subjectivity, create moments of insight which exclusive use of text cannot. Finally,

meanings do not, however, reside solely in texts, [...] ethnographic texts are interpreted and given meanings by readers on *their own* terms [...] photographs interact with, cross-reference and produce meaning in relation to other elements in the text, and [...] are given meaning by discourses and gazes that exist outside of the text. [Pink 2001: 136-137]

⁷ When “each person [...] is watched by all or certain of the others [y]ou have an apparatus of total and circulating mistrust” (Foucault 1980:158). Although I intended photography to insert a degree of distance between my gaze and those of my informant/ collaborators, they all knew they were taking pictures with a camera that would be returned to me, that I would see the pictures they took. Foucault might call this a form of disembodied surveillance.

What these statements imply is that a combined textual and visual methodology can serve to illuminate beliefs, concerns, personal and collective narratives, highlighting the dynamic nature of both the subjects of investigation and of the process of investigation itself by providing thick description of the experience of both the informant/ collaborator and ethnographer. This method of ethnography encourages and measures—qualitatively and quantitatively—the subjective expressions of conceptualizations of environment, culture, and identity among Indigenous youth, giving primacy to their subjectivity within an academic discourse that has focused primarily on imposing cultural classifications through ostensibly objective means.

Visual Free-Listing Methodology Explained

The cultural dynamism of Indigenous youth in general, and in the *Oriente* specifically, is clearly evident in published scholarship. These populations are young and growing, the majority of them born after the inception of industrialized oil exploitation in the *Oriente*, meaning they were raised within, and continue to inhabit political ecologies and economies that reflect the diverse influences of: 1) increasing market integration; 2) nearly two decades of transnational Indigenous organizing; 3) two resource-nationalist Correa administrations; 4) well-articulated and long-established discourses linking oil exploitation to ecological change and/or degradation; and 5) clearly disparate experience of the benefits and detriments of consistently expanding oil exploitation.

Additionally, younger generations of Indigenous people—more market integrated than older generations—demonstrate consumption aspirations and production patterns that indicate a trajectory of increasing involvement with the market economy, a trajectory that is almost reflexively considered the antithesis of environmental stewardship and conservation. Therefore, understanding the types of material and symbolic resources valued, perceptions of their availability and utility, and drawing conclusions about their collective valuation among this significant and emblematic demographic cohort is critical to understanding how Indigenous cultures continuously respond to the socio-environmental, political, and cultural dynamism that characterizes the contemporary *Oriente*.

In effect, participant photography of perceived available resources—the “important things” in their community—functions as a visual form of free-listing, a verbal methodology described by H.R. Bernard, in which participants are given a topic and allowed to enumerate responses which can then be analyzed in numerous ways (2006: 301). Application of the visual

free-listing (VFL) methodology facilitated the investigative freedom necessary to directly address the question of resources, integral to consideration of forms of resistance to, and resilience in the face of, challenges against human environmental rights posed by socio-environmental change catalyzed by oil exploitation. Guiding questions behind the application of this methodology are: What is the inter-community and inter-ethnic variability in participant representations of people, places, items, actions, and/or interactions that are subjectively considered important? What is the utility and availability of perceived resources?

Visual Free-Listing Maps

If they did not already know how, participants were briefly instructed on how to use the digital camera provided to them, then asked to take twenty pictures of things they believe are important. The intentional subjectivity of the term is intended to promote variability in the participant's gaze and mitigate the influence of the ethnographer. Participants were asked to describe the content of each photograph, including their reason for including a particular image—an indicator of the utility of the resource. Brief descriptions of the perceived application or utility of each resource—for example the medicinal properties of a given plant or the uses of a canoe or gasoline—were recorded on pre-prepared forms (See Appendix).

Additionally, participants were asked to describe the site where the image was captured, in other words, where the resource can be accessed as an indicator of resource proximity and/or availability. The proximity to or availability of a given resource in relation to residential areas provides qualitative information relevant to discussion of the accessibility of a resource. The difference between resources that are autonomously acquired and/or locally available and those that require a long journey and/or exogenous provision is a significant one. Responses are

aggregated according to national affiliation (Cofán or Huaorani) and according to the market integration level of a community, in order to identify variation or similarities in perceived availability of resources.

In all cases, although a particular image may include multiple resources perceived by the ethnographer—for example, a picture of a canoe, a waterway, the catch from a fishing trip, and family members—participants’ descriptions provide the labels used in both qualitative and quantitative analysis of the images. Images were categorized using criterion similar to those used in time allocation studies (i.e. subsistence activities or social reproduction, socialization, community labor, wage labor).

Statistical analysis of the photographs according to their content serves as a proxy for quantitative analysis of perceived incidence and prevalence of symbolic and material resources analyzed for the overall sample, cross-culturally, and by variation in terms of level of market integration (MI). Presentation of VFL takes a form similar to that of the participatory tenables mapping (PTM) and participatory risk mapping (PRM) diagrams described in detail in the following section. Graphic representations of VFL data (hereafter “VFL maps”) display the relationship between incidence and prevalence of resource perception according to the self-described content of the participants’ photography. A sample VFL map is included below.

Prevalence Index (P) ==>	1.0	
	0	1.0
Incidence Index (I) ==>		

As is the case in PRM/PTM maps, the x-axis of the VFL maps, numbered from zero to one, represents the index for incidence of perception of a given resource, the proportion of respondents interviewed, a gauge of how widely the symbolic or material resource is perceived (Baird et al. 2009: 467). An incidence index (I) will be derived from a relatively simple calculation of the percentage of respondents who identify a particular resource. If 27% of respondents identify a particular resource, then $I=0.27$ for that resource.

Similarly, the y-axis is numbered zero to one, and represents the prevalence of the identified category of resources. Prevalence of a response describes the proportion of total responses that refer a particular category of responses. In the case of visual free listing of symbolic and material resources, prevalence describes the proportion of the total photographs depicting a particular resource category. A prevalence index is derived from this proportion. For example, if 13% of total photographs taken depict a given resource, then $P=0.13$ for that resource. Prevalence indices differ from incidence indices. Incidence indices describe the percentage of respondents who mention a resource. Prevalence indices—neither a measure of resource utility or risk severity—describe the overall number of times a particular resource is mentioned by all respondents. This means that prevalence indices can serve as a proxy for collective valuation of a resource within a cohort. Such descriptions could be applied to verbal lists resulting from free-listing questions as well.

The combination of qualitative and quantitative analysis applied to this photographic data is intended to facilitate nuanced interpretation, elucidating individual and collective perspectives of young people who, as part of a growing demographic, are indicative of the trajectory of identity formation processes among Indigenous people, also of changing patterns of perceived

resource availability and valuation, information critical to discussions of socio-ecological resilience.

Participatory Tenables Mapping Literature Review

In an admittedly simplified analysis Smith and colleagues identify two broad approaches to questions of risk. A subjectivist approach which focuses on individual, subjective perceptions, allowing for expressions of perceived risk independent of any sort of collective history, and an objectivist approach which focuses on quantitative measurements and commonly defines “risk” as “imperfect knowledge with known probabilities of observing possible outcomes, [making risk]...distinct from ‘uncertainty,’ for which the probabilities are unknown” (Smith et al. 2000: 1946). I accept the subjectivist approach as the preferred one, most broadly because “asking people what worries them, and which worry is greatest, seems both practical and intuitive” (Smith et al. 2000: 1947), and because risk—exposure to uncertain circumstances and the possibility of incurring nontrivial loss—is a heterogeneous and situationally specific occurrence.

The heterogeneity of risk is suggested by the prevalence of confounding variables affecting risk responses in various contexts: culture, political and economic opportunities and expectations, ability to explain diverse manifestations risk, ability to control factors influencing risk, familiarity with the context of risk, or mastery of tasks that mitigate risk (Johnson 1991: 142). Smith et al concur, asserting that it “is incredibly difficult to construct an objective measure of risk severity, particularly one offering relevant comparisons among [disparate] risks” (Smith et al. 2000: 1947). The specific socio-environmental risks associated with the expanding oil complex in the *Oriente* have been stated repeatedly earlier in this thesis. Additionally, even small differences in agroclimatic conditions, historical conditions, or variation in gender, wealth, or primary source of employment are all reflected within individual risk assessments (Smith et al. 2001: 2). The multiple variables influencing individual risk assessments underscore the importance of focusing on subjective perceptions of risk, then aggregating these in order to

derive data that may be more accurately generalized and used in targeting research and assistance (Smith et al. 2000). The experience of variable risk among research participants implies the existence of variable security, tenability, or assets.

Smith et al. describe mitigation as one of four components of risk assessment, asserting that “diversification of one’s portfolio of assets and activities is a common example of mitigating behavior” (Smith et al. 2001:2). Expanding on this idea, it seems that the participatory risk mapping (PRM) methodology lacks a necessary corollary implied within the existing PRM framework. As people experience different levels of risk in relation to constantly changing variables, they possess different securities, activities, and beliefs. In other words, creating a simple participatory asset mapping methodology to accurately describe variation and resonance in asset assessments seems like a necessary and informative corollary to participatory risk-mapping that, by representing the dialectic between risk and resource availability, can provide a representation of living conditions more complete and accurate than representations based solely on risk.

Within community development discourses, the term “participatory asset mapping” has a distinct history, means of gathering data, and forms of data presentation, producing qualitative graphics rather than quantified data (Green & Haines 2002:10; Wang 1999:189-190). In order to prevent conflation of the two, very distinct methodologies, the methodology described in this paper will be referred to as “participatory tenables mapping” (PTM), and is intended as a corollary to the existing PRM methodology described in scholarship (Smith et al. 2000 & 2001; Baird et al. 2009), and will contribute to a more complete analysis of perceptions of community capacities and deficiencies than participatory risk-mapping alone. As suggested by Green and Haines (2002) and Wang (1999), community assets include material and symbolic resources. For

the purposes of this methodology, the term *tenables*, is defined as secure material and symbolic resources. For instance, both an outboard motor and perceived access to gasoline could be described as *tenables*, despite the distinction that the motor itself is a material resource, and perceived access to gasoline is a symbolic resource.

Despite clear and significant distinctions, the goals of participatory asset mapping methodologies described in existing literature, and the goals of the PTM methodology that is the focus of this paper, are very similar. “Asset mapping is a process of learning what resources are available in your community” and includes the “mapping of available skills and work experience,” the identification of natural resource assets that may serve as “an important source of economic development” like ecotourism or increased land value, and assessment of community spending practices (or resource usage) to identify resource needs and business potential (Green & Haines 2002: 9-10).

Discussing the identification of resources and the way these are valued is critical to a nuanced discussion of socio-environmental resilience based in the self-identified needs of those who face such degradation. Self-identified resources are the tools with which communities rebuild following ecological degradation, and resist further degradation. Embracing reflexive links between socio-ecological resilience and the protection of particular regions or species of flora and/or fauna, or to the simple cessation of certain practices, risks the imposition of exogenous expectations or viewpoints on communities suffering the effects of ecological degradation. Without going to the communities facing such problems, asking what they have and what they need, those of us interested in fostering socio-ecological resilience can fall into the epistemocentric trap—the re-articulated coloniality—that characterizes resurgent protectionism.

In a broad “genealogy of a cultural logic and peculiarly Western sensibility” linking Malthusian notions of overpopulation and ecological fragility in non-Western spaces and among non-Western peoples with contemporary discourses of conservation and long-existent discourses of colonialism, Agrawal and Sawyer suggest the need to complexify analysis of conservation discourses by recognizing their inherent power dynamics (Agrawal & Sawyer 2000: 72). As conservation can arguably be defined as the management of environmental risk, assertions made in Sawyer and Agrawal’s analysis inform a theoretical discussion of the need to expand risk-based analysis into a theoretical lens that, while acknowledging the many risks present in “Third World” political ecologies and economies, also acknowledges the active recognition and management of valuable symbolic and material resources by residents of these ecologies and economies.

Drawing from Derrida, Sawyer and Agrawal assert that nature “is not born but made” (Agrawal & Sawyer 2000: 74). The theoretical foundations of the PTM methodology described in this paper are similarly based in the notion that, like nature, risk is a construction, and

(as all other social reality) acquires definition and import within a matrix of competing and often contradictory social interests. At stake in the struggle to make claims over Nature [and risk] are what it means, how it should be used [or interpreted] and who has the power to decide [risk mitigation strategies and policy] [...] Throughout the history of natural (and social) sciences, classification—the delineation of identities and differences—has been an essential element in the establishment of colonial authority and power to assert truths and rights. It is the seductive power of classification—the authorial force derived from the violence of “drawing lines.” [Agrawal & Sawyer 2000: 74]

As resource security is also a construction, the PTM methodology is, in reality, simply a further means of defining and interpreting the dialectic relationship between risks and resources, a further means of classification of conditions experienced and expressed by interviewees, and therefore a continuation of the violence of drawing lines. Although such a dynamic will continue

until subalternized communities are included in development of methodologies used to evaluate their living conditions, PTM is a methodological attempt to avoid the pathologizing reification of risk, and its construction as a discrete, objective entity “divorced from [a broader] sociohistorical lens” (Agrawal & Sawyer 2000: 74), a lens that includes resource security.

Studies of risk perception exist because societies demand that policy-makers mitigate risk according to the expected severity of hazard, that the most important dimension to these demands is the expected severity of an hazard which is calculated on a societal scale by determining the severity of a single incident of a risk and its expected societal prevalence or magnitude (Sjöberg 1999: 543). Because participatory tenables mapping provides a means by which to begin analyzing the perceived prevalence and utility of secure symbolic and material resources, it provides a basis from which to demand from policy-makers the maximization and maintenance of these resources, giving this methodology both academic merit and potential significance for society.

Participatory Tenables Mapping Methodology Explained

To reiterate, the participatory tenables mapping methodology (PTM) is intended as an expansion upon participatory risk-mapping (Baird et al. 2009; Smith et al. 2000; Smith et al. 2001), an expansion meant to include a means of analyzing the perceived resonance and importance of socioeconomic, political, cultural, and environmental resources among interviewees, information relevant to discussing strategies and policies of risk mitigation *and* maximization and/or conservation of resource utility. Johnson (1991) enumerates a list of salient aspects of risk response analysis which reiterate the validity of participatory risk mapping and which iterate the validity of the participatory tenables mapping methodology, piloted during summer 2012 fieldwork in northern Ecuadorian Amazonia. Smith et al. “use the words ‘risk,’ ‘concern’ and ‘worry’ interchangeably because the pastoralists [they] studied do not make a meaningful distinction between these words” (2000: 1947). Similarly, in administering the participatory tenables mapping methodology, the word “tenables” was replaced with the term “important things,” an intentionally abstract framing that, in its breadth, found currency among varied groups of interviewees and will likely continue to do so.

The first of the salient aspects of risk response analysis enumerated by Johnson (1991), issue attention, applies to both risk and tenable resources, and is described with the question “What items in our environment catch our attention because they yield significant threat [risks] or benefit [resources]?” (1991: 144-145). Data gathered by the participatory risk and tenables mapping protocols address this point, one that implies the dialectical nature of risks and resources. Johnson’s additional points reinforce the imbrication of risk and resources, substantiate the validity of the participatory risk mapping methodology, and suggest correlate salient points of analysis of tenable cultural and symbolic resources. The next two points of

analysis mentioned are risk estimation and risk evaluation, respectively described with the questions, “How large is the risk?” and “How serious is the risk?” They also correlate with points of analysis integral to both participatory risk mapping (Smith et al. 2000: 1948) and tenables mapping, namely measurement of prevalence and severity or utility of risks and resources, respectively.

The final three points of consideration in analyzing risk responses—attribution of cause and blame, hazard control preference, and strategy implementation—relate directly to the follow-up questions critical to participatory risk and tenables mapping. In terms of the participatory risk mapping methodology, these points correlate to the post-ranking portion of the interview where participants are asked “how they used to solve” risks, “how they would like to solve them,” and “if and why they no longer could” solve them (Smith et al. 2000: 1948). In terms of the participatory tenables mapping protocol, these points of analysis correlate to post-ranking questions with a shift in focus from the mitigation of risk to the management of resources and maximization of their utility. How, if at all, are symbolic and material resources managed? How would interviewees like them to be managed? If resources are not managed, why not? How, if at all, does this management maximize resource utility? Are there other ways to maximize resource utility?

Participatory Tenables Maps

Overall, Johnson’s (1991) salient points of consideration in analyzing risk are reflected in Smith and colleagues’ (2000) description of risk as a “composite expression of exposure, perception, mitigation, and coping.” As mentioned above, a participatory tenables mapping framework is not intended as a substitution or an alternative to participatory risk mapping, but as

a complement. As such, it will employ much of the conceptual framework of participatory risk mapping, including conceptualizing the resource tenability as a composite expression of access, perception, maximization, and management. The first two composite parts of participatory risk and tenables mapping protocol provide quantifiable data. Exposure, defined as an “objective, measurable component related to space and time, but not to a particular person,” refers to the number of times that “a given hazard” is perceived by a specific person (Smith et al. 2001: 9). In the tenables mapping corollary, exposure to risk translates to “access to a resource,” a measurable quantity that describes temporally and spatially specific prevalence of access to a given material or symbolic resource, or tenable.

Perception is “a subjective component unique to individuals and not directly observable by a researcher...[that] reflects an individual’s belief that he or she might experience a particular hazard and how severe its effects might be” (Smith et al. 2001: 9). Different histories, preferences, and/or information can cause different subjective perceptions of identical exposure to a given risk. In the case of a tenables mapping framework, different histories, preferences, and/or information can cause different subjective perceptions of identical access to a given asset. In an Amazonian community this might be demonstrated in differential perceptions about access to game resources among individuals who live in the same region but use different hunting trails, or differences in perceived productivity of agriculture based on location of a particular swidden garden.

The last two components of risk assessment, mitigation and coping, “relate to the capacity to reduce the adverse effects of hazards, either *ex ante* (mitigation) or *ex post* (coping)” (Smith et al. 2001: 9). In the tenables mapping framework, these two components necessarily differ. Rather than addressing the manner in which the “adverse effects of hazards” are reduced,

the tenables mapping framework focuses on identifying how the utility of tenables is maximized in an *ex ante* or *ex post* fashion. An *ex ante* effort at increasing resource utility is referred to as maximization, while an *ex post* effort as management. The greater an individual's ability to maximize observable resource utility through premeditated behavior, the greater their maximization capacity. In an Amazonian community this might take the form of an individual working to maintain soil fertility in a swidden, or to accept hunting limitations in order to preserve wildlife populations. A person who enjoys the utility of a resource without exhausting that resource can be said to demonstrate effective management. In an Amazonian community this may take the form of managing forest resources or maintaining reciprocal social relationships.

Following assertions by Smith and colleagues, high exposure and perception will manifest as an increased number of resources mentioned in a tenables assessment. Tenables assessments vary in direct correlation with perceived subjective ability to manage and maximize the utility of resources. Meaning that someone with effective maximization and management strategies will likely perceive a high incidence of resource existence, and a relatively high utility of resources. Someone less equipped with maximization and management strategies may also perceive a high incidence of tenables, but may consider these to have low utility, as the beneficial qualities of unmanaged (and therefore, unmaximized) tenables are quickly exhausted or are otherwise non-resilient.

Creating a tenables map similar to the risk maps used by Smith et al. (2000: 1951) and Baird et al. (2009: 469 & 470) entails applying to data on the utility of various tenables, a similar analytic methodology already applied to analysis of risk severity. Incidence of an asset or tenable will be “simply the proportion of respondents interviewed who identified” that resource. The tenables map will gauge how widely the tenable is perceived by residents,” (i.e., the incidence)

along with and individual perceptions of how beneficial or important an asset is perceived to be relative to other assets (i.e., its utility). The level of utility of a given asset will be measured using an index that employs uniform intervals between ranked assets for a given respondent. For each respondent, the interval can be defined as $1/n_i$ where n_i is the number of assets identified by respondent i . Calculating individual utility index value A_{ij} for asset j of rank r among a group of n assets is: $A_{ij} = 1 - (a_{ij} - 1)/n_i$; an equation which can be used to create an asset map of identical format to those in Smith et. al (2000). The utility index is then calculated as $2 - A_{ij}$. The x-axis of the tenables maps represents the incidence index (I) of a perceived tenable resource, effectively, the percentage of respondents who perceived a given resource. The y-axis represents the utility index (U)—a measure of the ordinal ranking of perceived resource utility relative to that of other resources—is represented on the y-axis. As presentation of PTM data correlates fairly directly to that of PRM, the above description draws heavily from the work of Baird et al. (2009: 468), also from Smith et al. (2000: 1950).

According to a revision by Smith et al. (2001:5) which allows for the creation of more intuitive graphs and facilitates logistic regression analysis (Baird et al. 2009:467), in presenting the participatory tenables mapping data, the boundary values of zero (not an important tenable resource) and one (a tenable of primary importance) will be substituted for the boundary values of one and two used to calculate ordinal rankings and interior values. A blank tenables map is included below.

Utility Index (U) \uparrow	1.0	
	0	1.0
	Incidence Index (I) \rightarrow	

Broadly speaking, participatory tenables mapping described in this paper involves acquiring individual, subjective descriptions of “physical, human, social, financial, [cultural,] and environmental” (Green & Haines 2002: 10) resources within a community, and of the perceived incidence and utility of these assets in order to provide a representation of a community’s broad, policy-level needs and assets based on ethnographic level perceptions of both risks and resources. Study of asset or resource perception is likely to inform decision makers on matters of important resource management policies on issues as wide-ranging as wildlife conservation in Africa, to the funding of urban after school programs in inner city Chicago. In the case of the Indigenous communities in Ecuadorian Amazonia where this methodology was piloted, it revealed complex expressions of perceived resources and strategies for their management and enhancement, to which we turn next.

Data Collection for both Methodologies

In order to identify possible correlations between perceptions of resource availability and resource valuation to identity formation, and market integration among Indigenous youth, the participatory tenables mapping (PTM) protocol and visual free-listing (VFL) methodology were administered in a sample of four communities in Ecuadorian Amazonia, the *Oriente*: two Huaorani communities and two Cofán communities. For each nationality, one community with a high level of integration into the market (MI)⁸—the Cofán community of Dureno, the Huaorani community of Gareno—and one with a lower MI level—the Cofán community of Zábalo, the Huaorani community of Huentaro were chosen. Individual participants were selected based on amenability to being interviewed, after the requisite self-reported criteria of ethnic identity (Huaorani or Cofán), and their age (under thirty years old) were met.

A total of nineteen PTM and eighteen VFL interviews were conducted during June and July of 2012 in the four above-mentioned communities. All participants in the VFL portion also completed the PTM interview, though one PTM interviewee did not participate in the VFL methodology. As female participants constitute about 38% of the PTM sample and about 39% of the VFL interviews, there is a gender bias. Although gender-based disaggregation may reveal interesting comparisons, such analysis is beyond the scope of this thesis. Additionally, about 62% of the PTM interviews and 67% of the VFL interviews were conducted among Cofán youth, meaning that the aggregated data also shows a bias in favor of the Cofán nationality. Disaggregated according to the MI levels of respondents' community of residence, the sample sizes divide nearly equally, with 53% of PTM, and 50% of VFL participants living in low MI communities, while 47% of PTM and 50% of VFL live in communities with higher MI levels.

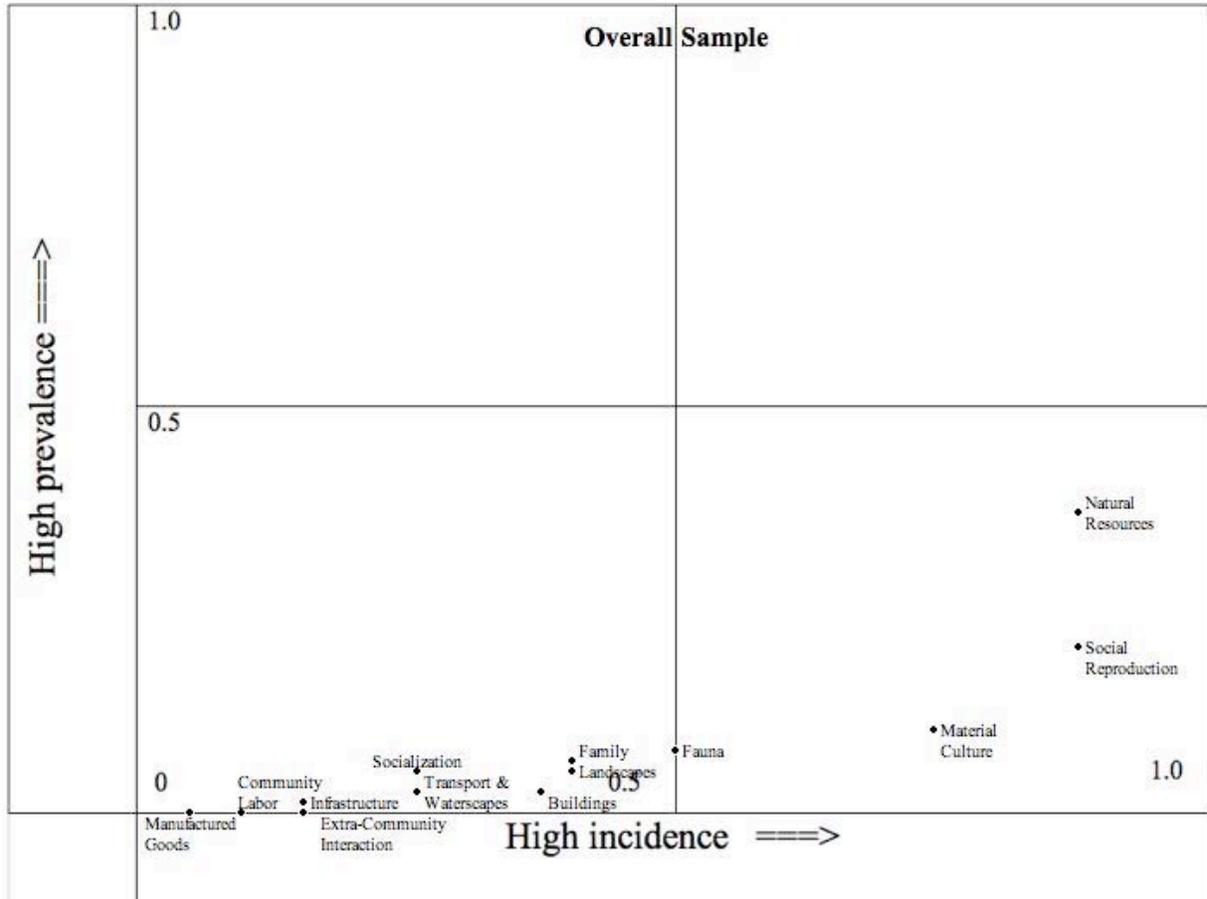
⁸ For a detailed description of variable, imbricated factors influencing level of market integration, especially in Amazonian Indigenous communities see Lu (2007).

Interviews in the Huaorani communities were conducted almost entirely in Spanish and mainly by the author, with assistance translating by Dr. Flora Lu and by family members and friends of the participants. The term tenable resources was translated into the intentionally broad Spanish term, “*cosas importantes*,” (important things), for interviews in Huaorani communities, where youth seemed to be more functionally bilingual in Spanish and Huaorani. In Cofán communities, the author conducted most interviews with the assistance of Cofán translators due to the more limited Spanish proficiency of many Cofán youth. Cofán interviewees were also asked to identify “important things,” in *A’ingae*, the Cofán language, “*osha’cho injege’cho*.”

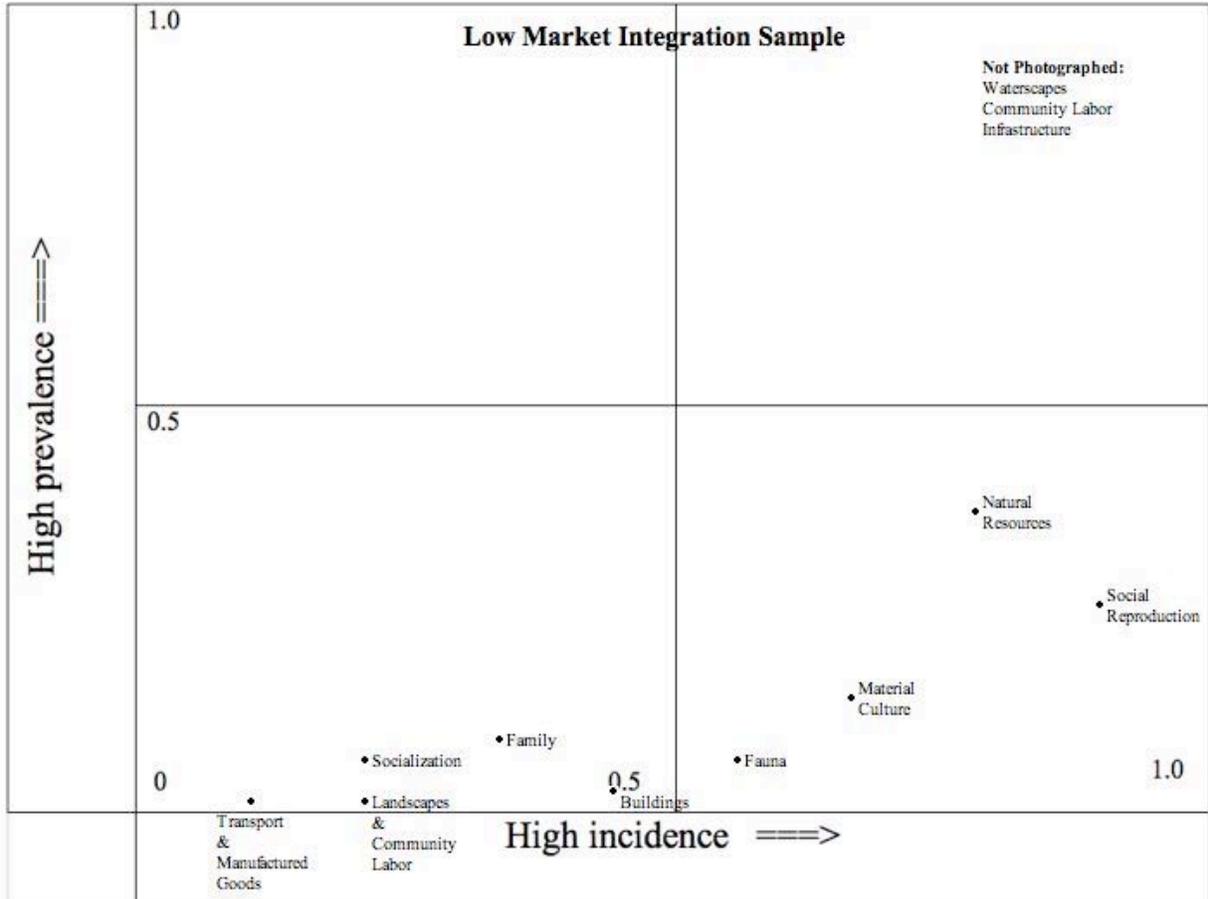
All portions of the PTM protocol were administered to every interviewee (listing and ranking of tenables, along with questions regarding the management of resources and maximization of their utility), although, in order to avoid directing the discussion, interviewees were not prompted to provide further responses to post-ranking questions if their initial responses were indefinite or unclear. Although participants were asked to take twenty photographs for the VFL methodology, and an additional self-portrait, four respondents only took nineteen, and were not asked to take an additional photograph before their interviews were conducted.

Visual Free-Listing Findings

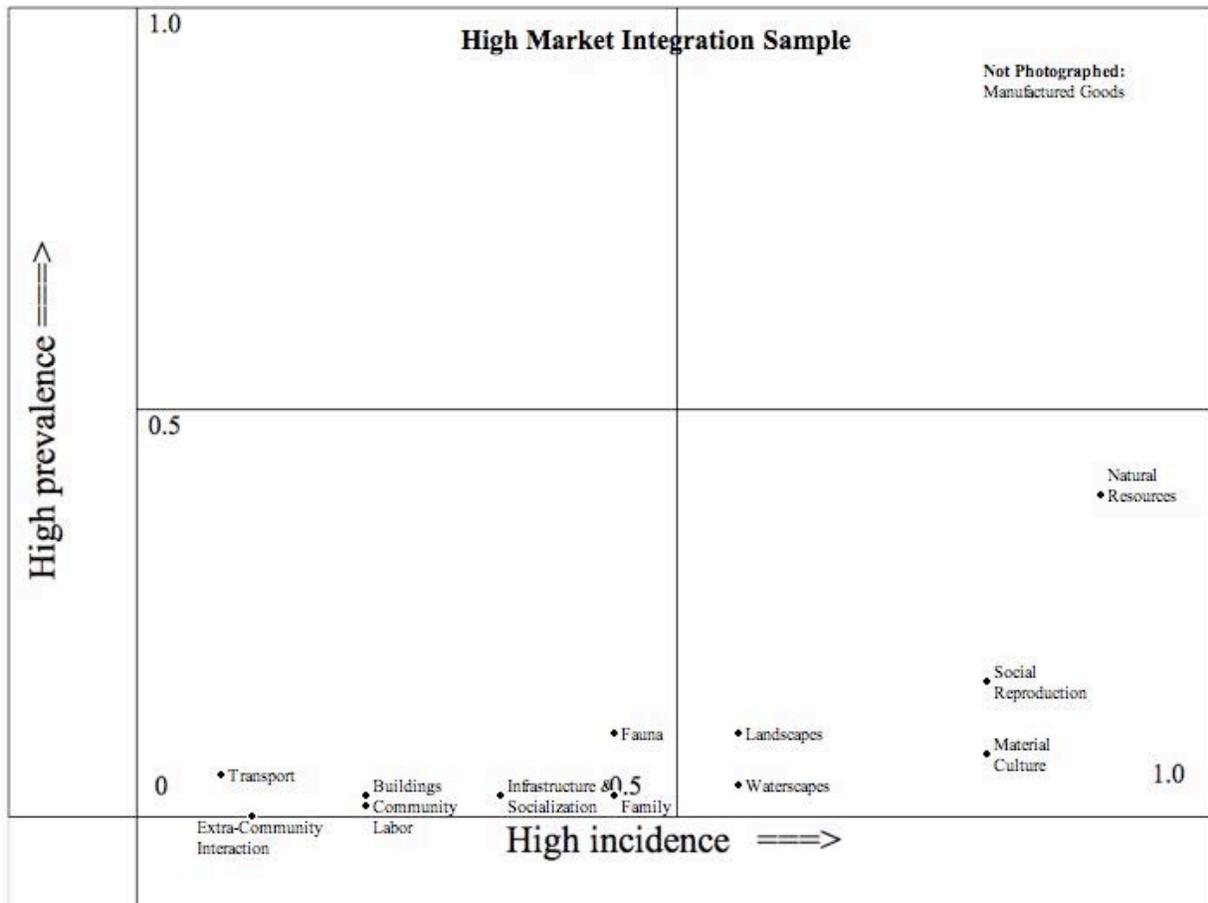
1. Overall	Incidence	Prevalence
Natural Resources	0.83	0.38
Material Culture	0.72	0.10
Transport	0.28	0.03
Landscapes	0.39	0.05
Infrastructure	0.17	0.01
Family	0.39	0.06
Socialization	0.28	0.05
Buildings	0.33	0.03
Manufactured Goods	0.06	0.01
Fauna	0.50	0.07
Social Reproduction	0.83	0.19
External Interactions	0.17	0.01
Non-Subsistence Labor	0.11	0.01
Waterscapes	0.28	0.02



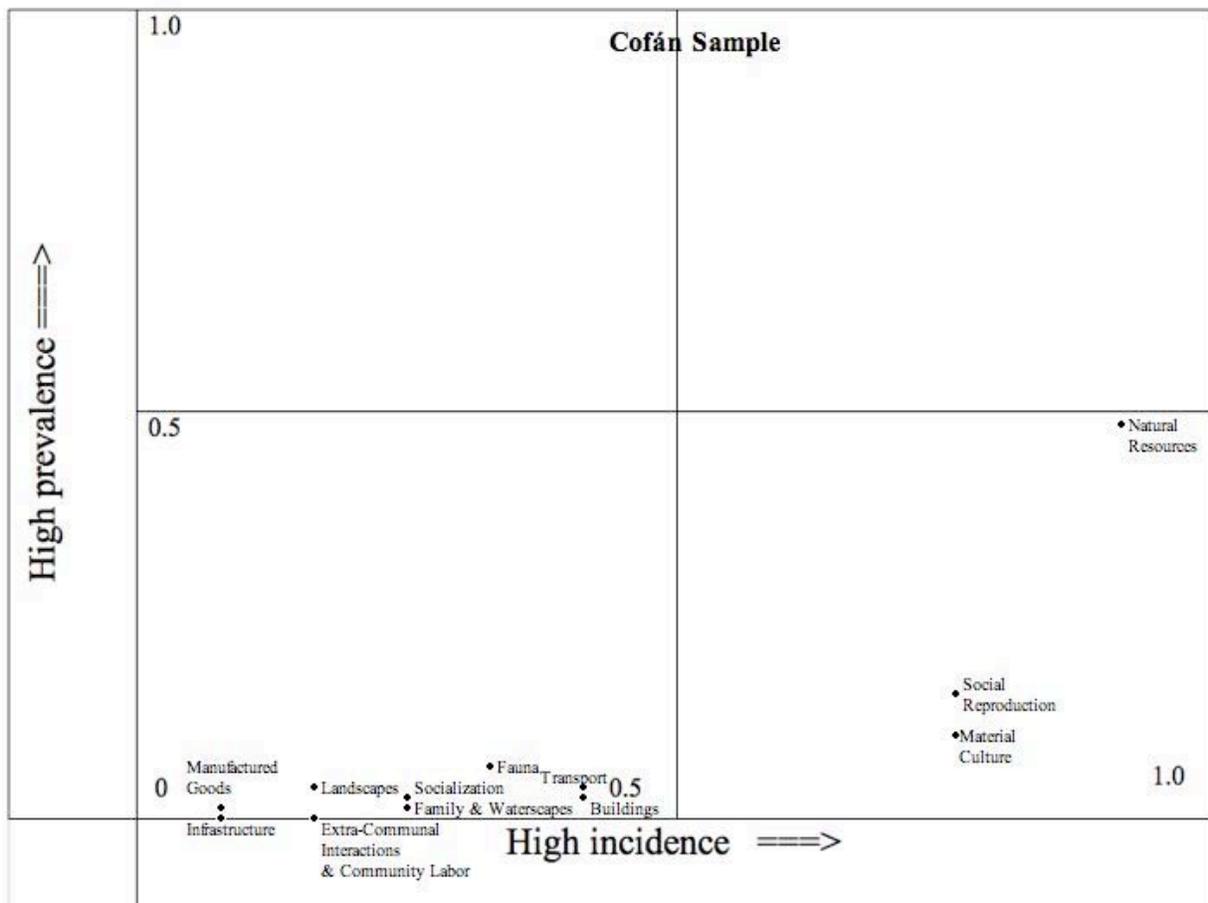
2. Low Market Integration	Incidence	Prevalence
Natural Resources	0.78	0.38
Material Culture	0.67	0.14
Transport	0.11	0.02
Landscapes	0.22	0.01
Infrastructure	0	0
Family	0.33	0.09
Socialization	0.22	0.06
Buildings	0.44	0.02
Manufactured Goods	0.11	0.02
Fauna	0.56	0.06
Social Reproduction	0.89	0.20
External Interactions	0.22	0.01
Non-Subsistence Labor	0	0
Waterscapes	0	0



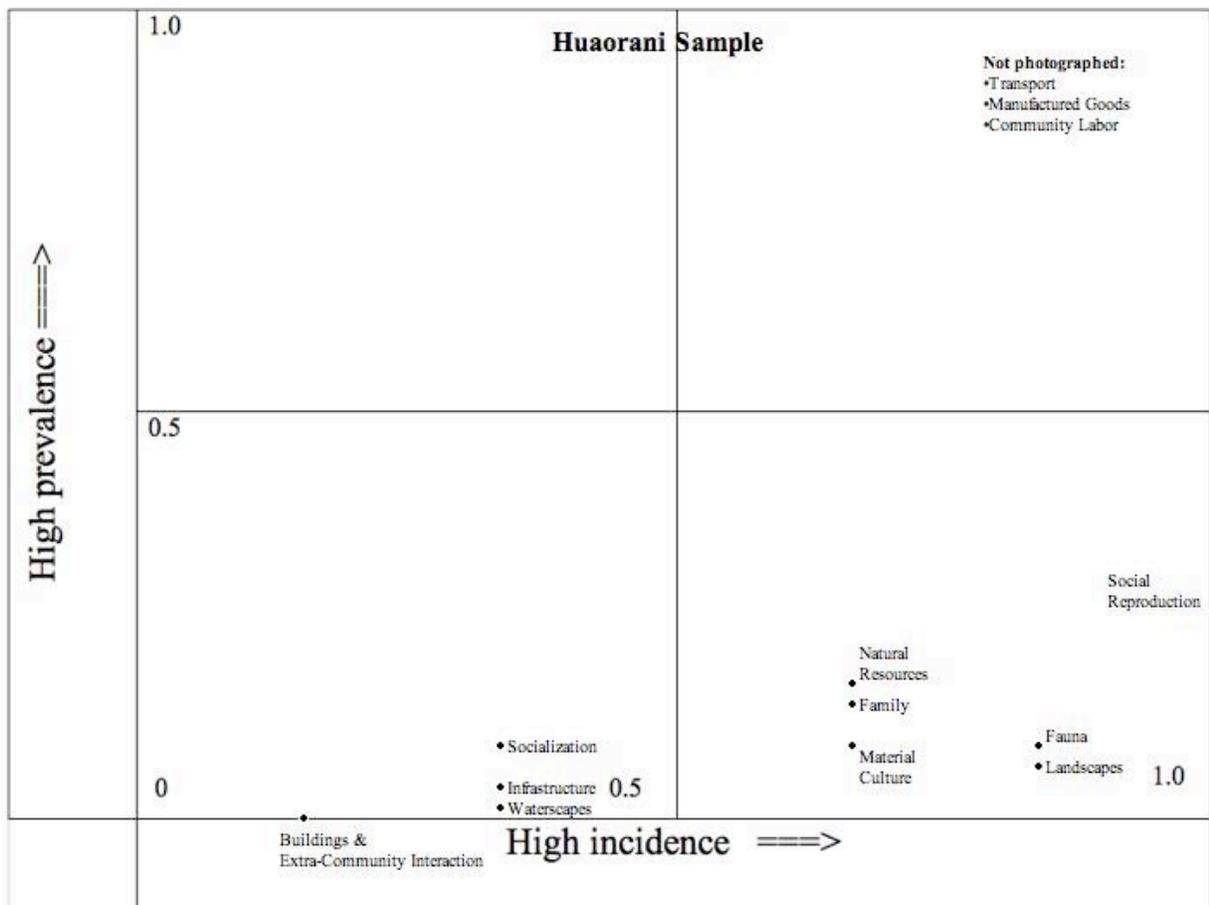
3. High Market Integration	Incidence	Prevalence
Natural Resources	0.89	0.38
Material Culture	0.78	0.07
Transport	0.08	0.04
Landscapes	0.56	0.09
Infrastructure	0.33	0.03
Family	0.44	0.03
Socialization	0.33	0.03
Buildings	0.22	0.03
Manufactured Goods	0	0
Fauna	0.44	0.09
Social Reproduction	0.78	0.17
External Interactions	0.11	0.01
Non-Subsistence Labor	0.22	0.01
Waterscapes	0.56	0.04



4. Cofán	Incidence	Prevalence
Natural Resources	0.91	0.49
Material Culture	0.75	0.11
Transport	0.42	0.04
Landscapes	0.17	0.03
Infrastructure	0.08	0.004
Family	0.25	0.02
Socialization	0.25	0.02
Buildings	0.42	0.03
Manufactured Goods	0.08	0.01
Fauna	0.33	0.06
Social Reproduction	0.75	0.14
External Interactions	0.17	0.01
Non-Subsistence Labor	0.17	0.01
Waterscapes	0.25	0.02



5. Huaorani	Incidence	Prevalence
Natural Resources	0.67	0.17
Material Culture	0.67	0.09
Transport	0	0
Landscapes	0.83	0.08
Infrastructure	0.33	0.03
Family	0.67	0.14
Socialization	0.33	0.09
Buildings	0.17	0.01
Manufactured Goods	0	0
Fauna	0.83	0.09
Social Reproduction	1.0	0.27
External Interactions	0.17	0.01
Non-Subsistence Labor	0	0
Waterscapes	0.33	0.03



Visual free-listing (VFL) maps and data tables for all categories and cohorts are presented in the previous pages. VFL maps are divided into quadrants to facilitate data interpretation. The statistical midpoints ($I=0.5$, $P=0.5$) that serve as the boundary between quadrants, will also function as the boundary in this paper's descriptions of indices as "high" or "low," although these distinctions are rather crude instruments. Points plotted in the upper right quadrant represent symbolic and material resources with high incidence index (mentioned by over half of participants), and high prevalence index (included in over half of the photographs). Those plotted in the lower right quadrant are mentioned by a majority of participants, but not included in a majority of photographs, suggesting a relatively lower collective valuation of the resource category. Points plotted in the lower left quadrant represent symbolic and material resources with low incidence and prevalence indices (those mentioned by less than half of respondents and included in less than half of the photographs). Finally points plotted in the upper left quadrant represent resources identified by less than half of participants, but included in over half of photographs, suggesting a relatively high valuation of resources in that category, despite its limited mention.

Descriptions of symbolic and material resources shown in photographs were divided into fourteen categories as seen in the VFL maps. Listed in no particular order, these categories are: waterscapes, landscapes, natural resources (including medicinal plants, building materials, and other raw, non-subsistence, materials), social reproduction (including all subsistence-related resources), material culture, fauna, family, buildings, transport, infrastructure (including provision of services like education or healthcare), socialization, (non-subsistence) community-labor, manufactured goods, and external interactions (meaning interaction with people or institutions that do not reside, or are not permanently located within, the community where the

photograph was taken). Within the overall sample the three categories photographed by most participants, those with the most prevalence, were natural resources (I=0.83, P=0.38), social reproduction (I=0.83, P=0.19), and material culture (I=0.72, P=0.10).

Analysis of VFL data in the five above-mentioned aggregations (the overall sample, Huaorani respondents, Cofán respondents, high MI level communities, and low MI level communities) reveals intriguing similarities and a few differences which greatly inform the discussion of perceived access to symbolic and material resources—the building blocks of human environmental rights, sociocultural reproduction, and socio-environmental resilience—in a geographically and socioeconomically broad, if demographically limited, sample of Indigenous residents of the *Oriente*. One of the most significant findings in the VFL map data is that the three above-mentioned categories—natural resources, material culture, and social reproduction—demonstrate the highest incidence and prevalence indices in four of the five analytical cohorts, and also show relatively high indices in the fifth cohort. This revelation, in conjunction with other more nuanced ones, suggests the complexity of, and significant tensions within, the political economies and ecologies of the *Oriente*.

I. Infrastructure

Incidence and prevalence indices for this category—including health and educational facilities, but also water storage and electrical infrastructure—when compared between cohorts reveal intriguing distinctions. Among culturally-disaggregated cohorts, the distinctions are relatively significant (Cofán I=0.08, P<0.01; Huaorani I=0.33, P=0.03), although differences in sample sizes rather than cultural differences may be the cause of this distinction. For the overall sample, indices for this category are relatively low (I=0.17, P=0.01). The most intriguing distinctions in incidence and prevalence indices for this category are between the MI-

disaggregated cohorts (High MI $I=0.33$, $P=0.03$; Low MI $I=0$, $P=0$). This distinction suggests the significance of MI level in resource perception and valuation.

II. *Manufactured Goods*

Salient in analysis of incidence and prevalence indices for manufactured goods is the fact that regardless of the way data was (dis)aggregated, indices remained consistently low. In the overall sample, both incidence and prevalence were extremely low ($I=0.06$, $P=0.01$). Of the disaggregated cohorts, the highest indices were recorded among the low-MI group ($I=0.11$, $P=0.02$). Two cohorts, Huaorani and high-MI, did not register any mention of manufactured goods. The consistency of these responses is a salient feature of this data.

III. *Natural Resources*

By far the most frequently mentioned and widely photographed category, natural resources includes photographs depicting medicinal plants with various uses, medicinal animal products, numerous plant-based building materials, and the raw materials used in reproduction of material culture, raw materials which include animal products (peccary teeth, for example) but also *achiote*, *ayahuasca*, numerous types of seeds, and significantly, *Astrocaryum chambira*, the chambira palm, in its non-processed form. Fibers derived from processed fronds of chambira are integral to the reproduction of material culture in the form fishing nets, various bags, hammocks, and *artesanías*, or cultural artwork.

This category demonstrated the highest incidence and prevalence indices in the overall sample ($I=0.83$, $P=0.38$), the Cofán cohort ($I=0.91$, $P=0.49$), and both the high-MI cohort ($I=0.89$, $P=0.38$) and the low-MI cohort ($I=0.78$, $P=0.38$). In the Huaorani cohort, this category demonstrated an incidence index among the top three of all categories ($I=0.67$) and the second-highest prevalence index ($P=0.17$). Although this difference may be culturally determined, the

fact that the Huaorani cohort was a relatively small sample ($n=6$) compared to other cohorts that were at least 50% larger ($n\geq 9$), seems to most readily explain this distinction. Regardless of this minor difference, the high incidence and prevalence index of this category demonstrates a consistently high valuation of natural resources in relation to other perceivable resources. As this category, like certain others, is directly related to ecological integrity and conservation, its salience among youth who live in dynamic and complex economies and ecologies, ethnospheres and biospheres, is a significant finding.

IV. Material Culture

Similar to the natural resource category, analysis of responses in the material culture category (e.g., *artesanías*; chambira fishing nets, bags, and hammocks; spears; blowguns; headdresses) demonstrated consistently high incidence and prevalence indices across differently aggregated cohorts. Indices for this category in the overall cohort were among the highest calculated ($I=0.72$, $P=0.10$) of any of the other resources. Among culturally-disaggregated cohorts, the incidence and prevalence indices were relatively similar (Cofán $I=0.75$, $P=0.11$; Huaorani $I=0.67$, $P=0.08$), suggesting similar cross-cultural valuation of this resource. Interestingly, the high MI level cohort demonstrated the highest incidence index of all of the cohorts ($I=0.78$), though the prevalence index among this cohort ($P=0.07$) was the lowest calculated, while among the low-MI cohort, the incidence index was among the lowest calculated ($I=0.67$), yet the prevalence index was the highest calculated ($P=0.14$). This suggests that among the high-MI cohort, although many people mention the value of material culture, based on the prevalence index, it could be argued that material culture has a relatively low collective level of valuation. Among the low MI cohort, the prevalence index is almost double that of the high MI cohort, suggesting a higher level of collective valuation of material culture.

V. Social Reproduction

The indices for social reproduction are also among the highest calculated for all resources. The lowest incidence and prevalence indices for the social reproduction category occur among the Cofán cohort (I=0.75, P=0.14), while the highest indices occur among the Huaorani cohort (I=1.0, P=0.27). The cross-cultural difference in incidence and prevalence indices for this category—inclusive of all subsistence-related activities—seems to counter ethnographic information on differences in agricultural practices between the Cofán and Huaorani nationalities. Both groups farm two staple crops, manioc and *Musa* species (e.g., plantains, bananas), although Cofán communities also plant corn as a staple. Both groups also plant a variety of secondary crops and hunt/gather in swidden gardens after staples have been harvested (Lu et. al 2012:214). In light of these observed similarities and differences, the variation in cross-cultural incidence and prevalence indices that manifests in the VFL data seems attributable to idiosyncrasies of the individuals who comprised the small sample. I hypothesize that among a demographically larger sample, cross-cultural incidence and prevalence indices for this category would align.

A significant similarity manifests in perceived incidence and prevalence rates for this category. Prevalence indices are relatively similar (High MI P=0.17, Low MI P=0.20). Incidence indices are only separated by about 10% (High MI I=0.78, Low MI I=0.89). As communities with low-MI level rely more heavily on agriculture, hunting, fishing, and gathering for nutritional security, it seems to logically follow that these communities would demonstrate a higher valuation of resources falling into this category. The small distinction in incidence and prevalence indices—proxies for collective valuation—suggests that those who consider these

resources important, a majority of all participants, demonstrate similar collective valuation of the resource regardless of community MI-level.

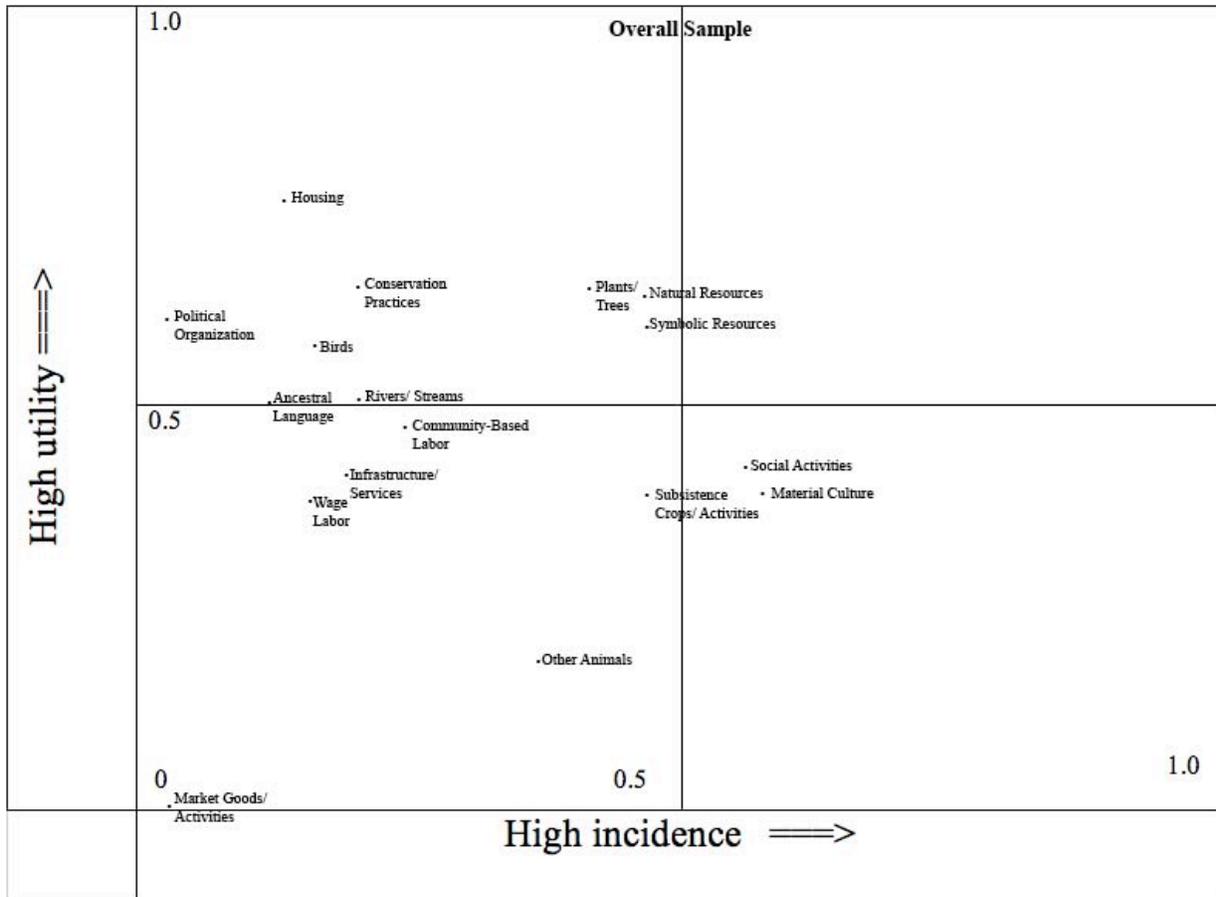
VI. *Waterscapes/ Landscapes*

Significant differences manifest among incidence and prevalence indices for culturally-disaggregated cohorts in the landscape category (Cofán $I=0.17$, $P=0.03$; Huaorani $I=0.83$, $P=0.08$), once again suggesting the need for larger samples. The waterscape category remains relatively consistent in the cross-cultural cohorts (Cofán $I=0.25$, $P=0.02$; Huaorani $I=0.33$, $P=0.03$), indices that are also consistent with the waterscape indices of the overall sample ($I=0.28$, $P=0.02$). The significant cross-cultural distinction in landscape indices may reflect the Huaorani history of relatively recent adaptation to use of riverine resources in addition to forestial ones, but is likely to simply be the product of idiosyncrasies due to small sample size. Among the overall sample, landscape indices ($I=0.39$, $P=0.05$) are significantly higher than those for waterscapes ($I=0.28$, $P=0.02$).

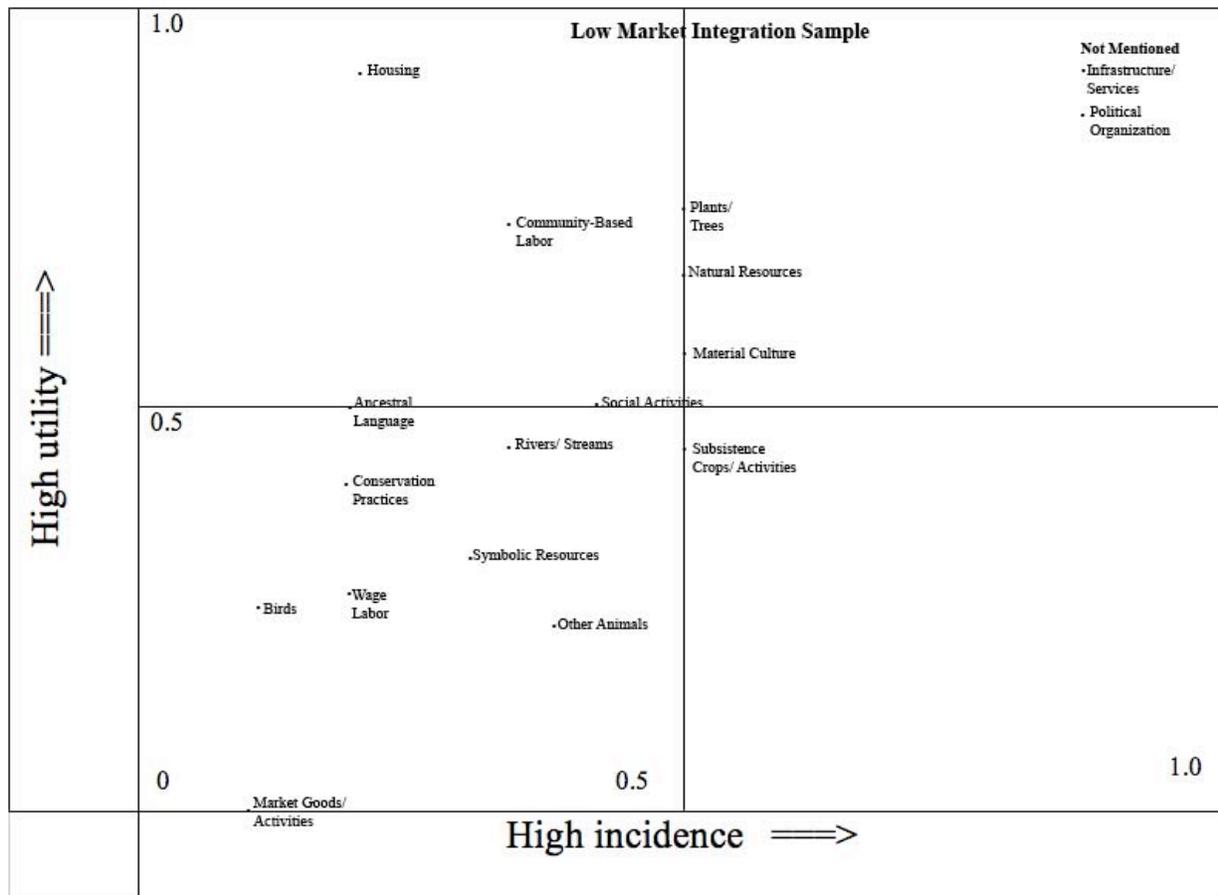
Among MI-based cohorts, the distinction between incidence and prevalence indices in these categories is pronounced. For the landscape category, indices among the high-MI cohort are more than double those for the low-MI cohort (High MI $I=0.56$, $P=0.09$; Low MI $I=0.22$, $P=0.01$). Among the low-MI cohort, no photographs for the waterscape category were taken ($I=0$, $P=0$), while the high-MI cohort indices for this category ($I=0.56$, $P=0.04$) were similar to those for the landscapes category.

Participatory Tenables Mapping Findings

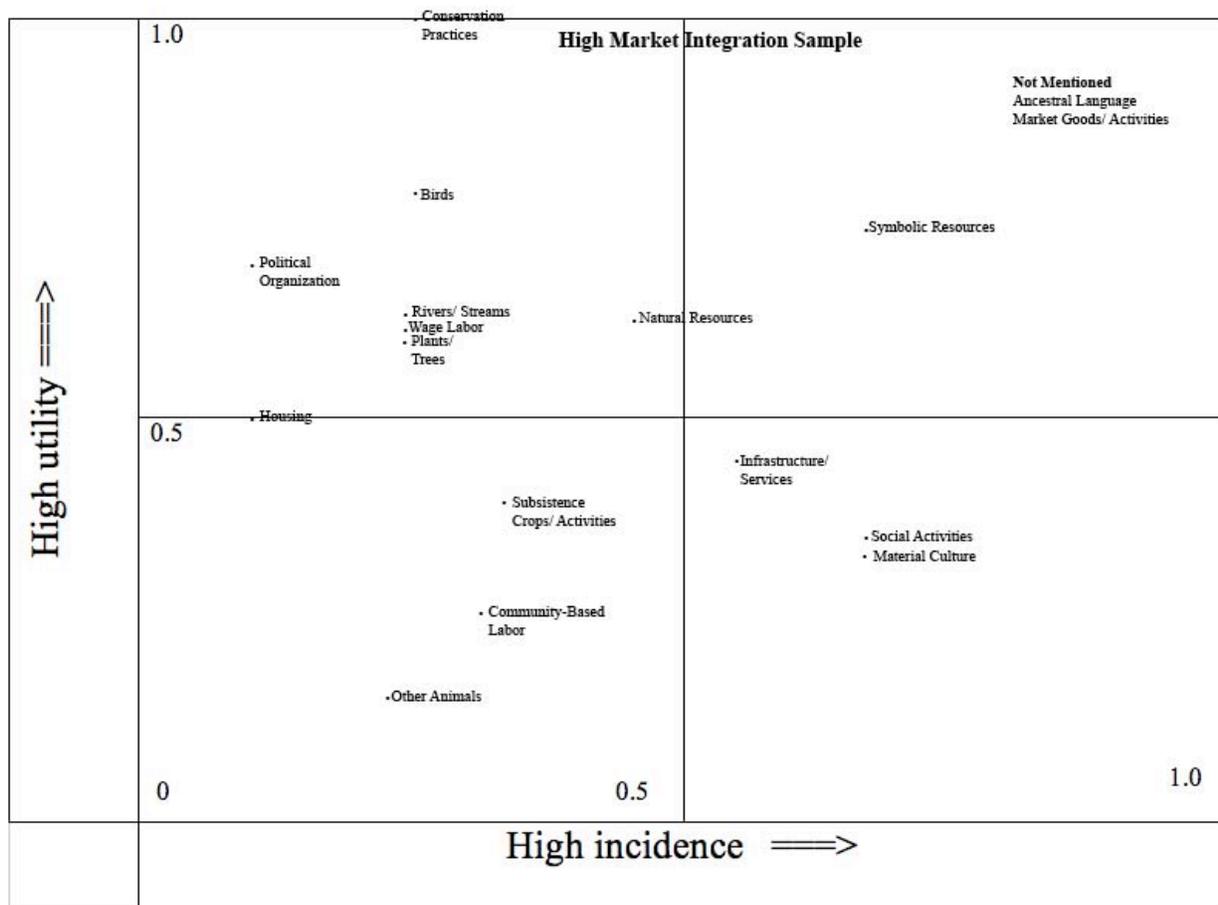
6. Overall Sample	Incidence	Utility
Natural Resources	0.47	0.66
Plants/Trees Non-medicinal	0.37	0.69
Birds	0.16	0.60
Other Animals	0.32	0.17
Rivers/Streams	0.26	0.51
Wage Labor	0.21	0.42
Community-based Labor	0.31	0.48
Market Goods/Activities	0.05	0
Language	0.11	0.50
Housing	0.16	0.77
Infrastructure/Services	0.26	0.44
Subsistence Crops/Activities	0.47	0.43
Material Culture	0.58	0.43
Intangible Resources	0.47	0.60
Conservation Practices	0.21	0.70
Social Activities	0.53	0.42
Political Organization	0.05	0.67



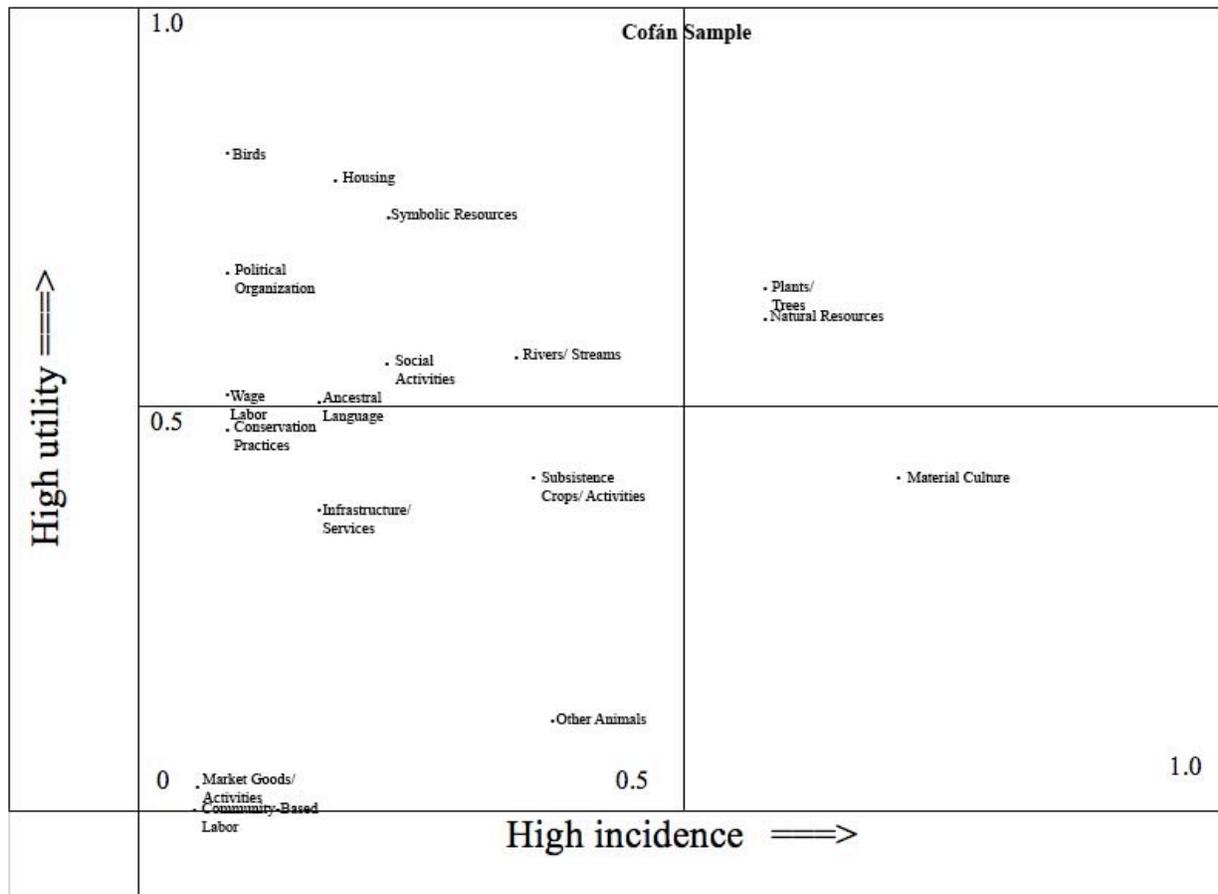
7. Low Market Integration	Incidence	Utility
Natural Resources	0.5	0.64
Plants/Trees Non-medicinal	0.5	0.73
Birds	0.1	0.20
Other Animals	0.4	0.18
Rivers/Streams	0.3	0.46
Wage Labor	0.2	0.25
Community-based Labor	0.3	0.69
Market Goods/Activities	0.1	0
Language	0.2	0.5
Housing	0.2	0.9
Infrastructure/Services	0	0
Subsistence Crops/Activities	0.5	0.47
Material Culture	0.5	0.56
Intangible Resources	0.3	0.33
Conservation Practices	0.2	0.40
Social Activities	0.4	0.50
Political Organization	0	0



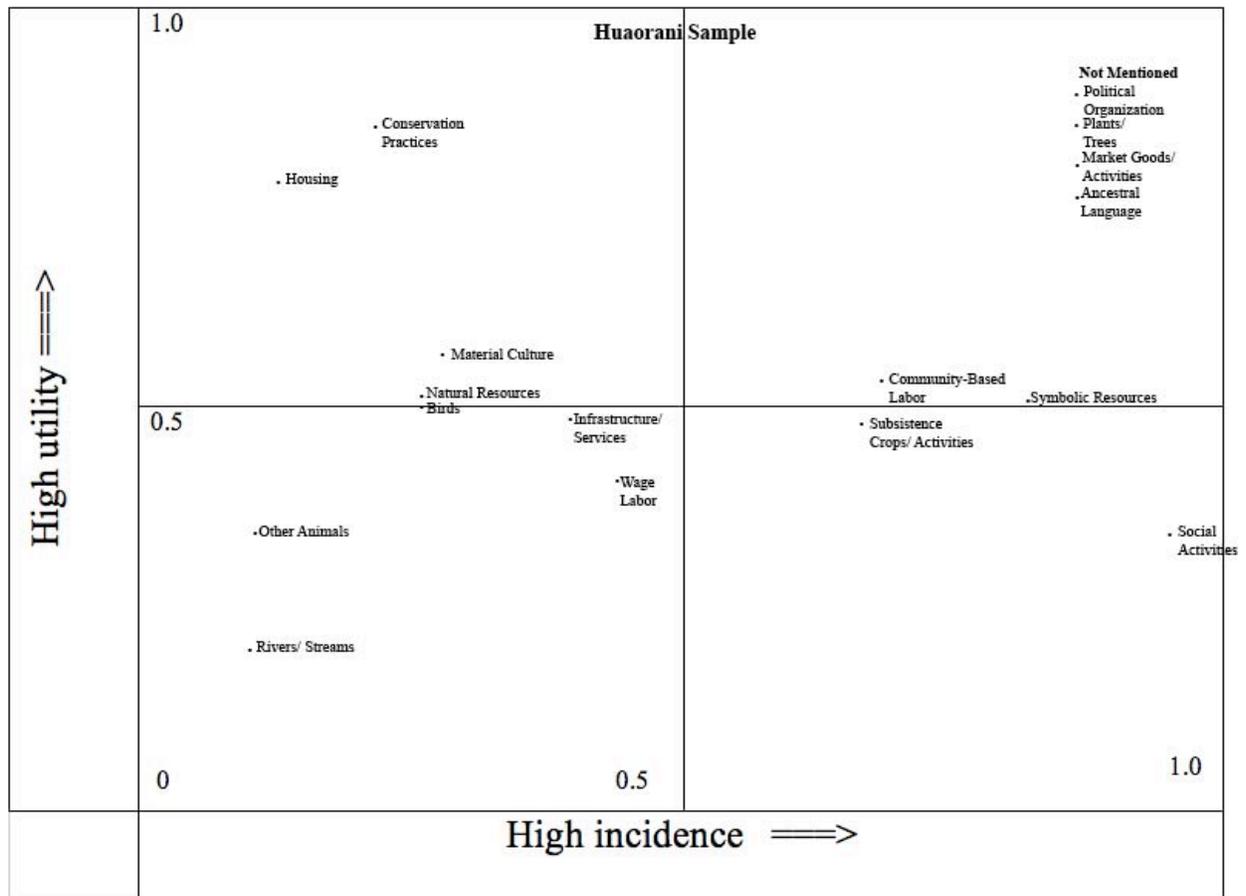
8. High Market Integration	Incidence	Utility
Natural Resources	0.44	0.59
Plants/Trees Non-medicinal	0.22	0.67
Birds	0.22	0.80
Other Animals	0.22	0.12
Rivers/Streams	0.22	0.60
Wage Labor	0.22	0.60
Community-based Labor	0.33	0.27
Market Goods/Activities	0	0
Language	0	0
Housing	0.11	0.50
Infrastructure/Services	0.55	0.44
Subsistence Crops/Activities	0.33	0.38
Material Culture	0.67	0.32
Intangible Resources	0.67	0.73
Conservation Practices	0.22	1
Social Activities	0.67	0.37
Political Organization	0.11	0.67



9. Cofán	Incidence	Utility
Natural Resources	0.58	0.66
Plants/Trees Non-medicinal	0.58	0.69
Birds	0.08	0.80
Other Animals	0.42	0.12
Rivers/Streams	0.33	0.59
Wage Labor	0.08	0.50
Community-based Labor	0.08	0
Market Goods/Activities	0.08	0
Language	0.17	0.50
Housing	0.17	0.75
Infrastructure/Services	0.17	0.40
Subsistence Crops/Activities	0.33	0.39
Material Culture	0.75	0.39
Intangible Resources	0.25	0.72
Conservation Practices	0.17	0.50
Social Activities	0.25	0.54
Political Organization	0.08	0.67



10. Huaorani	Incidence	Utility
Natural Resources	0.29	0.50
Plants/Trees Non-medicinal	0	0
Birds	0.29	0.50
Other Animals	0.14	0.40
Rivers/Streams	0.14	0.20
Wage Labor	0.43	0.40
Community-based Labor	0.71	0.57
Market Goods/Activities	0	0
Language	0	0
Housing	0.14	0.80
Infrastructure/Services	0.43	0.47
Subsistence Crops/Activities	0.71	0.47
Material Culture	0.29	0.60
Intangible Resources	0.86	0.53
Conservation Practices	0.29	0.90
Social Activities	1	0.37
Political Organization	0	0



Tenables maps and data tables for all categories and cohorts are presented in the previous pages. Tenables maps are divided into quadrants in order to aid visual interpretation of the data. The statistical midpoints ($I=0.5$, $U=0.5$) that serve as the boundary between quadrants, will also function as the boundary in this paper's descriptions of indices as "high" or "low," although these distinctions are rather crude instruments. Points plotted in the upper-right quadrant represent tenables with a relatively high level of utility, and identified by more than half of the respondents in the sample. Points in the lower right quadrant are mentioned with high incidence, yet perceived to have low utility. Points plotted in the lower left quadrant represent tenables perceived as having a relatively low level of utility, and identified by fewer than half of the respondents. Points plotted in the upper left quadrant represent tenables perceived to have relatively high utility, by less than half of respondents.

In presenting this data, responses were divided into seventeen major categories of symbolic and material resources. These categorizations are, in no particular order: natural resources (including medicinal plants); (non-medicinal) plants and trees; birds; other animals; rivers/streams; wage labor; community-based labor; market goods/activities; ancestral language; housing; infrastructure/services; subsistence crops/activities including hunting and fishing; material culture; intangible resources; conservation practices; social activities; and political organization. The tenables mentioned with the most frequency among the aggregated sample were material culture and social activities ($I=0.58$ and 0.53 , respectively), although utility indices for these categories were relatively low ($U=0.43$ and $U=0.42$, respectively). Conversely, those resources with the highest utility indices were expressed with lower incidence indices: conservation practices ($U=0.7$, $I=0.21$); housing ($U=0.77$, $I=0.16$); natural resources ($U=0.66$, $I=0.47$); and plants/trees ($U=0.69$, $I=0.37$). This pattern—where a higher incidence index

coincides with lower utility index, and vice versa—coincides with patterns in the relationship between incidence and severity indices described in Smith et al. and is similarly “a useful basic point to grasp” (2000: 1951).

Analysis of PTM data points aggregated into five cohorts (the overall or aggregate sample, Huaorani respondents, Cofán respondents, residents of communities with high MI levels, residents of communities with low MI levels) reveals intriguing distinctions that inform a discussion of culturally specific perceptions of resource availability and utility, as well as potential correlations between perceived access to resources and levels of market integration. In summary, tenables maps of the data collected among youth in Ecuadorian Indigenous communities reveal cross-cultural variety and similarity in perceptions of resource incidence and utility, with some significant differences among each cultural group, and among respondents living in communities at distinct ends of the spectrum of MI levels.

I. Infrastructure/Services

Another salient element of comparison between various cohorts, the infrastructure/services category encompasses mentions of schools, health centers, roads, access to those “important things” usually provided by governmental entities or their proxies, and as such are relatively unobtainable solely through community-based action. In an aggregated representation of data, infrastructure/services are a resource with low incidence and medial utility ($I=0.26$, $U=0.44$), a description relatively consistent with that offered by the Cofán cohort ($I=0.16$, $U=0.4$). Among Huaorani respondents, the incidence index is somewhat higher than in the above-mentioned cohorts ($I=0.43$), but utility index remains similar ($U=0.47$). Broad distinction emerges among the MI-determined cohorts. Those living in communities with a high MI level express perception of this resource at a rate significantly higher ($I=0.55$) than those of the

aggregate and culturally specific cohorts, although perceived utility among the high MI cohort ($U=0.44$) remains consistent with that of the aggregate and cultural cohorts. Significantly, the low MI cohort did not express perception of infrastructure/services as a tenable resource ($I=0$), and therefore a measure of its utility in these communities cannot be derived ($U=0$).

II. *Intangible Resources*

Distinctions between perceived incidence and utility of intangible resources among cultural groups and MI-determined cohorts also seem significant. This category includes responses that mention getting an education, maintaining good health, and more generally, having a good quality of life. Intangible resources like having an education and/or good health are categorized distinctly from material resources like community schools or health centers, placed in the category of infrastructure/services. Aggregated data for all respondents demonstrates a medial incidence index for intangible resources ($I=0.47$), although their perceived utility was relatively high ($U=0.6$). Among Cofán respondents, incidence of intangible resources was minimal ($I=0.25$), and their perceived utility was relatively high ($I=0.72$). Among Huaorani respondents the incidence was much higher ($I=0.86$). Interestingly, the utility index among Huaorani respondents ($U=0.53$) is also relatively high. Significantly, among respondents living in high MI communities, both incidence and utility indices for intangible resources were high ($I=0.73$, $U=0.67$) while among respondents living in low MI communities these were low ($I=0.3$, $U=0.33$).

III. *Natural Resources*

Also salient are the relationships between cultural affiliation and community MI level in expressions of the perceived incidence and utility of natural resources, defined as organic, non-subsistence, domestically-produced and/or obtained materials. These include organic building

materials, medicinal plants, fiber derived from the chambira palm, *achiote*, *ayahuasca*, and various species of seeds used in producing ancestral artwork or *artesanías*. Aggregated data reveals an incidence index near the statistical midpoint (I=0.47) and a relatively high utility index (I=0.66). Among Cofán respondents both incidence and utility indices for natural resources were high (I=0.58, U=0.66). Huaorani respondents expressed perceived incidence and utility of natural resources at lower levels (I=0.29, U=0.5). Despite these culturally distinct expressions of perceived incidence and utility of natural resources, these distinctions were minimal among MI-determined cohorts data (High MI: I=0.44, U=0.59; Low MI: I=0.5, U=0.64), also between these groups and the broader aggregated data.

IV. Material Culture

Ancestral material culture is broadly defined as non-market derived, community-produced goods and/or ancestral practices, a category which includes *artesanías*, ancestral dress, games, foods, and the broad category of ancestral customs. Mentions of food in this category correspond to respondents' mention of *comida típica*, foods prepared in a typical (or ancestral) manner, categorized distinctly from mentions of basic subsistence crops and activities like swidden agriculture, hunting, and fishing. In aggregated data, expressed perception of ancestral material culture has relatively medial incidence and utility indices (I=0.58, U=0.43). Among Cofán respondents, the incidence (I=0.75) is more than double that of Huaorani respondents (I=0.29). Conversely, Huaorani respondents place a higher utility value (U=0.6) on ancestral material than Cofán respondents whose utility index is slightly lower (U=0.39) than the aggregate value. Interesting distinctions emerge in the MI-based analysis of the incidence and utility indices for ancestral material culture, with low MI communities expressing medial

incidence and utility indices (I=0.5, U=0.56). Among high MI communities incidence increases, while the utility index drops (I=0.67, U=0.32).

V. Subsistence Crops/ Activities

The subsistence crops/ activities category includes mentions of swidden gardens or “chakras,” also mention of subsistence crops like manioc or species of the genus *Musa* (bananas, plantains). Also included are mentions of working in the garden, and mentions of gathering, hunting, and/or fishing. Although subsistence crops and activities were mentioned at wide a range of incidences (I=0.33-0.71) among all five cohorts, range of utility indices was fairly limited (U=0.38-0.47). Aggregated incidence and utility indices for this resource were medial (I=0.47, U=0.43). Huaorani respondents’ replies showed the highest incidence index (I=0.71), also one of the highest utility values as well (U=0.47), although relatively high incidence in a few additional categories among the Huaorani cohort might be a product of small sample size. It seems noteworthy that the high MI cohort provided the lowest incidence and utility indices for this resource (I=0.33, U=0.38), also that the low MI cohort provided relatively high incidence and utility indices (I=0.5, U=0.47) in relation to other cohorts.

Discussion of the Findings for Both Methodologies

Encompassing the lifespans of Indigenous people under thirty years old, sociocultural and ecological transformation catalyzed by oil exploitation continues to characterize the *Oriente*. The expanding oil complex is correlated to an increase in market contact among Indigenous communities (Lu & Sorensen 2008: 14). During fieldwork, this correlation was clearly visible in the study communities, as proximity to facets of the oil industry in these communities correlated to an easily visible increase in various production and consumption related indicators of increased market integration among Indigenous communities: regular consumption of purchased foods, many market intensive possessions, increased time dedicated to commercial activities, monetary income generation by various means including cash crops and industry, proximity to infrastructure and technologies (Lu 2007: 599).

Academic literature recognizes that the practices of capitalism in general, of oil exploitation specifically, destroy the social and material conditions necessary for oil exploitation, and more generally, for production under the capitalist model. Additionally, the oil complex has been intricately linked to numerous forms of violence—political, structural, and environmental—and more generally to violations of human environmental rights, especially among the marginalized people who live in or near hydrocarbon extraction sites.

Despite widespread recognition of the socio-environmental destruction initiated by the oil complex, extractivism continues to expand, publicly justified in Ecuador by arguments that assert that the new post-neoliberal State under the 2008 constitution exhibits a plurinationalist, conservationalist ethos guaranteeing *buen vivir*, good living to Ecuadorian citizens, including Indigenous people. Analysis of data on the individual and collective valuation of representative categories of symbolic and material resources—natural resources, material culture, subsistence

activities and/or social reproduction, infrastructure and/or services, landscapes/waterscapes, and intangible resources—challenges the discourse of oil as development model, meaning the promise of State-sponsored development funded by the oil complex—in other words, oil as the fuel of the Citizens’ Revolution—by revealing intriguing tensions and significantly problematic aspects of the oil complex in Ecuador.

Numerous salient points arise in analysis of data for the above-mentioned categories.

Significantly, the facts that Indigenous youth perceive and/or demonstrate:

- 1) Low incidence and low utility/valuation, those symbolic and material resources related to infrastructure—and therefore dependent on market integration and the oil as development model—although some distinctions in these perceptions of utility/valuations exist among groups at different MI levels.
- 2) Intangible resources like health and education to have low incidence but high utility, suggesting that lack of access to these intangible resources does not equate to a low estimation of their use value.
- 3) Manufactured goods to be resources with low incidence and utility/ valuation.
- 4) High incidence of the natural resources provided by intact ecosystems, although perceived utility and/or valuation of these resources differs somewhat between groups with different MI levels.
- 5) Both high incidence and utility/valuation of their material culture, reproduced via access to natural resources.
- 6) A relatively direct correlation between MI level and the perceived incidence and primarily aesthetic valuation of waterscapes and landscapes.

7) perceive the incidence and utility/valuation of social reproduction and/or subsistence crops and activities at rates which suggest distinct cultural practices, re-affirm the correlation between consumption patterns and MI level, and reinforce the connections between the Indigenous cultures and the ecological capital and means of (sociocultural) (re)production represented by intact ecosystems.

The discussion that follows consists of a more extensive analysis of each of the above points, analysis substantiated by description of the incidence and utility/prevalence indices for each category of resources.

Although culturally-based distinctions appeared in PTM and VFL map indices within many categories, the most significant distinctions within these categories manifested between residents of communities at different MI levels, and therefore, at different proximities to oil infrastructure at any stage of production. Admittedly, the small sample size in this pilot study, especially among participants of the Huaorani nationality, makes broad generalization of conclusions drawn from this data hasty at best. Further investigation with a larger sample size would be necessary before ascribing cultural origins to distinctions between resource perception and valuation, although the mere presence of these distinctions raises interesting questions regarding the historical trajectories of each group, especially regarding the impact of oil development on culturally-specific definitions of quality of life and the means by which it is improved. Response patterns similar to those described in the previous section, and analyzed below, in a larger sample size would complicate existing notions of indigeneity, market integration, conservation, oil as development discourses, meaning the promise of development by an oil-funded State, and their impact in the *Oriente*, and arguably elsewhere.

Infrastructure and/or Services

Infrastructure was rarely mentioned as an important, secure resource in participants' responding to both the PTM and VFL data, where 26% and 17% of respondents, respectively, perceived these resources. Notable among the MI-based distinctions in the PTM data is the perception of infrastructure/ services by over half of participants living in high-MI communities (55%), while none of those living in low MI communities reporting infrastructure/ services as a tenable resource. PTM utility indices remained consistent among the four cohorts where infrastructure/ services were mentioned as tenable resources ($U=0.4-0.47$), suggesting that the perceived benefits derived from access to infrastructure are valued similarly, where they are perceived to be available. In the VFL data, a similar MI-related correlation arose, with 33% of high-MI participants depicting facets of infrastructure in their photographs, while none of those living in low MI depicted infrastructure.

This distinction between verbal mentions of infrastructure and/or services (26% in PTM data) and depictions of its material presence in a community (17% in VFL data), suggests that access to the basic material facets of infrastructure—health center, schools, electrical and sewer systems—is not as prevalent as is access to the benefits of that infrastructure—healthcare and an education—in certain communities. The disparity between access to the perceived benefits of infrastructure and the experience of its material presence reiterates the fact that the benefits of infrastructure, as perceived by Indigenous youth, are most likely to exist outside the spaces to which they have quotidian access. The dearth of material presence of infrastructure is clear in the VFL data, which reveals that only about 1% of total resources depicted included reference to infrastructure.

The fact that neither methodology recorded incidents of perception of infrastructure as an important, securely accessible resource among low MI level respondents is significant. That those who live farthest from oil exploitation do not perceive access to infrastructural development reiterates the connection between oil and community investment that has long existed in the *Oriente*, while directly questioning the de facto existence of equity in/and development that is the promise of Ecuador's postneoliberal Citizens' Revolution funded by the oil complex. The fact that youth living in low MI-level communities did not express perception of this resource suggests that Indigenous populations desirous of expanded infrastructure may be more likely to actively seek market integration, which in the *Oriente* often (almost exclusively) translates into interaction with the oil complex via commercial transactions including wage labor, or permission of oil exploitation within Indigenous territories.

Intangible Resources

Only included in analysis of PTM methodology data, the intangible resources category includes mentions of being healthy, having an education, and generally "living well," and demonstrates a similar positive correlation between community MI level and the incidence and utility indices for this category. Among high-MI level communities these indices were almost double those of low MI level communities (High MI I=0.67, U=0.73; Low MI I=0.3, U=0.33). The broad, relatively arbitrary nature of this category, including terms as broad as "living well" makes interpretation of this data somewhat subjective. However, difference in perception according to MI level undoubtedly suggests that residents of low-MI communities experience material access to educational and healthcare infrastructure with less frequency than residents of high-MI communities. It is also worth considering that those who live in low-MI communities

may have naturalized the concept of “living well” to the point that it is not considered a resource but more of a generalized state of being. Differences in indices may also result from changing definitions of health, education, and “good living” among people living in high-MI communities.

Manufactured Goods and Market Goods/Activities

In both the PTM and VFL data, incidence and utility/prevalence indices for these categories were consistently low in relation to perceptions of other resources. Interestingly for the VFL methodology among the high-MI cohort, no responses were recorded for the manufactured goods (I=0, P=0), while among the low-MI cohort indices were slightly higher (I=0.11, P=0.02). For the overall sample in the PTM methodology, the comparable incidence index was even lower (I=0.05), while the utility index was the lowest possible (U=0). Similar to the findings in the VFL methodology, among the high-MI cohort no responses were recorded for the market goods/ activities category during the PTM portion of the interview, while among the low-MI cohort, the incidence (I=0.10) was comparable to that of the VFL methodology (I=0.11). The utility index of this category, when it was mentioned as a tenable resource, was always the lowest possible (U=0). In combination, this data directly challenges—as does data presented in coming sections—the resurgent protectionist notion that following contact with the market economy, subsequent generations of Indigenous people become infatuated with market goods, forsaking their reliance on natural resources and the goods produced from them.

Natural Resources

Among responses to both methodologies, responses that can be organized into this category were by far the most prevalent, demonstrating incidence indices among the top three in

overall samples and in disaggregated cohorts. As this category includes a broad range of specific resource items, forest-derived products including building materials, medicinal plants, birds and animals (as a tourist draw), and clean water, the fact that these resources continue to play a fairly important role in quotidian concerns like housing, nutrition, and travel in each of the four study communities likely contributes to the fact that incidence and valuation/ utility indices in MI-determined cohorts is consistent with responses in the aggregate cohort. The fact that PTM utility indices and VFL prevalence indices were consistently high relative to other perceived resources, regardless of participants' cultural affiliation or MI level, further discredits the resurgent protectionist argument—summed up in the statement “[b]iodiversity conservation is doomed to failure when it is based on bottom-up processes that depend on voluntary compliance” (Rabinowitz quoted in Wilshusen et al. 2002: 19)—an argument so outmoded that contradicting it is arguably tantamount to presenting a straw man.

In the VFL data, incidence indices for this category were between 0.67 and 0.91. Although prevalence indices among the small sample of Huaorani participants was relatively low ($P=0.17$), among other cohorts including the overall sample, prevalence indices were between 0.38 and 0.49, indicating a high level of collective valuation relative to other perceived resources. In the PTM data—other than among the small Huaorani cohort where indices were relatively lower ($I=0.29$, $U=0.5$)—indices for both of these categories among all cohorts indicated a high rates of perception of this resource, as well as a high perceived utility ($I=0.44-0.66$, $U=0.59-0.66$). High valuation and perceived utility of natural resources (inextricable concepts) by a majority of the sample population—conditions reflected in the PTM and VFL data among all cohorts—suggest a desire to foster conservation, a desire expressed regularly by participants during interviews and informal conversations.

Of the many discussions I had with Indigenous residents of the *Oriente*, the importance of secure, consistent access to the resources in this category was a central concern, as many of the Indigenous people to whom I spoke recognized that their sociocultural survival and resilience are contingent upon these resources. A young man in the Huaorani community of Gareno referred to members of his nationality who no longer participate in agriculture or hunting, or work to reproduce their material culture, as “not people.” In *Huao Tededo*, the term *Huaorani* literally refers to “the people” while in the same language an outsider is a *cowode*, a cannibal or non-human. In *A'ingae*, the word for “person,” is *a'i*, while an outsider is a *cucama*, a stranger. For both Cofán and Huaorani people, membership in their particular sociocultural group is etymologically equated to humanity. To lose access to, or to cease to value, the natural resources through which this sociocultural group is reproduced can become a loss of one’s humanity, an epistemologically and ontologically profound connection to conservation that, in my opinion, is much deeper than recognition of the need to protect certain keystone species or biodiversity in general. Despite this profound connection to conservation revealed by the PTM and VFL data, the fact remains that to consider all Indigenous people devout conservationists is just as problematic as considering them all devout consumers.

Material Culture

In part a reiteration of the high levels of perceived incidence and prevalence/utility of natural resources, data for the material culture category—encompassing goods produced almost exclusively from natural resources—also reflects a generally high collective estimation of the items which fall into this category, although analysis of the MI-determined cohorts shows surprising correlations. In the PTM data, Cofán respondents expressed perception of this

resource at a rate nearly twice that of Huaorani respondents ($I=0.75$ and $I=0.29$, respectively), which reiterates the need for a larger sample. Overall incidence indices were among the highest calculated for any resource in both the PTM ($I=0.58$) and VFL ($I=0.72$) data. However, the incidence indices, as well as the VFL prevalence index—a proxy for collective valuation—and the PTM utility index among MI-determined cohorts differs in a consistent, and intriguing way.

Although VFL and PTM data shows a positive correlation between MI-level and the incidence index for this category, it also shows a negative correlation between MI-level and utility/ prevalence indices for the same category. Respondents living in high MI level communities expressed perception of this resource category at a rate higher (VFL $I=0.78$; PTM $I=0.67$) than the overall sample (VFL $I=0.72$; PTM $I=0.58$), while expressing the perceived utility ($U=0.32$) and prevalence ($P=0.07$) of this resource lower levels than any of the other cohorts. The relatively low perceived utility and collective valuation of this resource, along with its high incidence among the high-MI cohort in comparison to the low-MI cohort and the overall sample suggests shifting priorities among Indigenous youth.

I would argue that this data reflects scarcity of material culture, giving it an increased use value as a cultural marker, amidst simultaneously decreasing exchange value of material culture—Indigenous material culture has a relatively low market value—among high-MI level communities, those most affected by changing patterns of consumption, production, and social interaction. Utility index for this category among low-MI level communities ($U=0.56$) is significantly higher than in high-MI level communities ($U=0.32$). The same is true for the prevalence index of high-MI communities ($P=0.07$) in comparison to that of low-MI communities ($P=0.14$). Superficially, this may seem counterintuitive as an increasingly scarce resource seems likely to develop increasing utility. However, decreasing perceived utility of

ancestral material culture may be the result of replacement technologies. For example, the use of shotguns and machetes in hunting may result in decreased perceived utility of a blowgun and/or spear.

Landscapes and Waterscapes

Responses in this category are analyzed primarily through the VFL methodology, and include “important things” that were, in some cases, photographed solely for their aesthetic value. The PTM methodology also contains a similar category (rivers and streams) with incidence indices ($I=0.26$) similar to that of the VFL waterscapes category in the data, and utility indices ($U=0.51$) that are medial in comparison to other resources, a higher level of valuation than registered in the VFL data ($P=0.02$), where the majority of other categories were ascribed higher utility, albeit often lower levels of perceived incidence.

Among overall samples in the VFL data incidence and prevalence indices are significantly higher for landscapes than for waterscapes (Landscapes $I=0.39$, $P=0.05$; Waterscapes $I=0.28$, $P=0.02$), possibly a reflection the fact that significant resources encompassed by other categories (swidden gardens, hunting quarry, and plant-based natural resources, all crucial to sociocultural reproduction) are terrestrial as opposed to aquatic. This might also merely reflect the fact that photographing land-based resources—those less likely to require access to a canoe, gasoline, or require the temporal investment of river travel—is simply more convenient. This distinction between perceived utility/ valuation of landscapes and waterscapes, either for their functional or aesthetic value, seems to be a subject worth investigating among a larger sample.

Significant correlations between MI level, and incidence and prevalence indices exist for both the landscape and the waterscape category. Among the high-MI cohort, indices were relatively high in comparison to those of other resources (Landscapes $I=0.56$, $P=0.09$; Waterscapes $I=0.56$, $P=0.04$) while among the low-MI cohort these indices were relatively low (Landscapes $I=0.22$, $P=0.01$; Waterscapes $I=0$, $P=0$). The distinction seems counterintuitive given that those participants who live in low-MI communities rely on resources provided by landscapes and waterscapes more heavily than do those participants who live in high-MI communities. This distinction is mirrored in the PTM waterscapes category where low-MI correlates to lower perceived incidence and utility indices.

The distinction is clarified by considering the concept of the marginal utility of resources, the concept that as a resource is amassed or depleted, the use value of a unit of that resource decreases or increases, respectively. Meaning, if I own twenty cows, the importance of a single one of those cows is much less than if I only own one cow. Despite the fact that landscapes and waterscapes are resources with varied, inconsistent (if existent) units of measurement, the fact remains that more access to arable land, more access to plentiful viable water resources—a lack of scarcity—lends itself to a diminished valuation of access to these resources. Among the low-MI communities of Zábalo and Huentaro, these resources are more readily available than in the high-MI communities of Dureno and Garenó. I would argue that higher use value of these resources among high-MI communities is a result of limited access, and that a similar logic applies to low-MI communities and increased access to resources. The correlation between a rise in valuation of natural resources and observation of their scarcity established in academia (Lu 2005:213) is reiterated empirically by this investigation.

Subsistence and Social Reproduction

In both the VFL and PTM data, resources falling into this category demonstrated incidence and utility/ prevalence indices among the highest derived. Culturally-specific distinctions in both the PTM and VFL data, in perceived incidence and utility/ prevalence of subsistence crops and activities—swidden gardens, staple crops like manioc and species of banana, hunting, fishing—may also be attributed to low sample size. However, in a cross-cultural study based on time-allocation measures, Huaorani participants were observed to undertake subsistence-related tasks for greater amounts of time than the study's Cofán participants (Lu 2007: 597), which may explain the fact that Huaorani respondents perceived the incidence and utility/ prevalence of subsistence crops/ activities at higher rates than Cofán respondents.

Distinct perceptions among MI-determined cohorts of the incidence and utility of subsistence crops/ activities in the PTM data, reiterate the significance of consumption patterns as an indicator of MI level. Research has established a negative correlation between intake of market-produced foods and consumption levels of hunted and, to a lesser extent, gardened foods in Huaorani communities (Lu 2012). Respondents from high-MI communities perceive subsistence crops and activities as a tenable resource with an incidence and utility lower than that expressed by residents of low-MI communities (High MI: I=0.33, U=0.38; Low MI: I=0.5, U=0.47). Further investigation of a possible negative correlation between measures of MI level, such as increased intake of purchased foods, and valuation of subsistence crops and activities, along with valuation of other tenable resources, seems like a potentially fruitful application of the PTM methodology.

In one of the most significant distinctions that emerge between the PTM and VFL data, incidence and prevalence indices for this category are nearly identical among MI-based cohorts (High MI $I=0.78$, $P=0.17$; Low MI $I=0.89$, $P=0.20$), suggesting similar collective valuation of these resources. The material presence of objects and activities which fall into this category was ubiquitous in all of the communities where I conducted fieldwork: manioc, species of banana, hunted quarry, fish, communal and/or individual labor in terms of gardening, hunting, or fishing. The dissonance between VFL and PTM data for this category brings into question whether photographs of these resources were taken out of simple convenience of material access, or due to their high utility/ valuation. In light of high valuation of resources with similar organic origin—mainly the natural resources category—it seems most likely that high incidence and prevalence of photographs of subsistence-related resources and activities does indeed reflect a high collective valuation of these among participants.

“Modernity,” the “Traditional,” and the Problem with Oil as Development

The material presence and importance of organic resources—organic in the sense that they have biological origins—demonstrated by the incidence and prevalence of their photographic depiction and their verbal mention, stands in stark contrast to the material absence of resources market-derived resources, and resources provided by the Ecuadorian State, predominantly represented in the *Oriente* by the State oil company, its subsidiaries and subcontractors. The significance of the data collected in this investigation lies in this contrast, in the fact that in both verbal (PTM) and material (VFL) measures, a cross-cultural sample of Indigenous youth living at various levels of market integration demonstrated with relative

consistency across all cohorts a high estimation of organically-derived resources and a simultaneously low estimation of market-derived and/ or State-provided resources.

Why is this significant? Most broadly, the fact that Indigenous youth show high esteem for organically-derived resources—those contingent upon ecological integrity, those upon which sociocultural reproduction is contingent, those intricately connected to the “traditional”—while showing relative disdain for market-derived and State-provided resources, products of “modernity,” suggests the complexity of contemporary identity formation processes among Indigenous youth in the *Oriente*, and by extension, among coming generations of Indigenous people. In effect, these results, if replicated in broader sample, challenge the very notions of modernity and the traditional by empirically demonstrating their contemporary imbrication. In other words, this data reveals as a baseless fallacy the

conventional liberal trope of nostalgic despair about the eclipse and extinction of Indian societies from Alaska to Tierra del Fuego, due to what is seen as the inevitable path of cultural destruction on account of Western religions and moralities, land-grabbing, Western diseases, Western language, Western clothes, Western junk food, Western alcohol, Western haircuts, and, more often than not, Western mirrored self-deprecation and tortured ambivalence regarding Indianness [or more specifically, Indigeneity]. [Taussig 1993: 129]

This data reveals the agency of the youth involved in this investigation, their ability to navigate both the modern and traditional, emerging with a broadly expressed epistemological and ontological connection to their indigeneity amidst exposure to, and appreciation of, aspects of “Western” culture.

However, this data also reveals the problematic and tension-filled nature of the political ecologies and economies of the *Oriente*, especially in relation to oil development. As academic literature describes, as fieldwork interviews reiterated, the State-run oil complex in Ecuador is expanding, and will continue to do so at gunpoint, at the end of a truncheon, amidst clouds of

teargas if necessary. The promise of the oil as development model—the justification for its violent enforcement and potentially violent consequences—is widespread access to the fruits of modernity, access to *sumak kawsay*, *buen vivir*, to good living. Both the VFL and PTM data demonstrate that such a promise has not been fulfilled, that infrastructure—manifesting primarily in the human rights of healthcare and education—remains invisible and Indigenous residents of the *Oriente*, while these populations continue to rely on organic resources for sociocultural reproduction, organic resources directly threatened by the oil complex.

Indigenous youth expressed strategies for resource maintenance and maximization of utility that are rooted notions of conservation, of development that safeguards ecological integrity. Discussing community investment and development in another portion of the *Oriente*, Etchart writes that “the [Ecuadorian] State has left everything in the hands of the oil company” (Etchart 2010:67), as assertion verifiable in each of the four study communities through observation of infrastructure-related projects, or their absence. Respondents expressed strategies for maintenance and maximization of health and education, mentioned the building of schools and health-centers, some mentioning the need for roads, all of which entail the presence of the oil complex and increased market integration. Through their socioeconomic and political marginalization by the oil as development model, Indigenous people are placed in a position where maintaining and maximizing the utility of organic resources—subsistence crops/activities, ancestral material culture and natural resources—is imperiled by attempting to secure another set of market-derived and State-provided resources, namely the human rights of healthcare and educational services, and the improved quality of life, the good living, these provide.

Analysis of the individual and collective valuation of resources in the PTM and VFL data reveals that the oil as development model, where oil is the fuel of *sumak kawsay*, has failed the Indigenous residents of the *Oriente*, and continues to imperil the resources upon which they depend. This failure—iterated by the Ecuadorian ambassador to the United States, who, when a decade ago was challenged to respond to the socio-environmental damages caused by the oil complex in the *Oriente* said, “Of course we’re concerned about *los indios* but our national sovereignty is at stake” (Sawyer 2002: 162)—was only reiterated by the recent assertion by Rafael Correa that his Citizen’s Revolution, that the State, has “never failed” (Neuman 2013: A3) the people of Ecuador. What the data collected in this investigation reveal is that there has indeed been a failure, that the discursive promise of *sumak kawsay* for all Ecuadorians has not been achieved.

“[T]he gap between plans attempted and results achieved” (Ferguson 1993: 257) in the case of the postneoliberal, nationalist oil as development model in place in Ecuador is extremely telling. The promise of State-sponsored development, funded by the oil complex—the oil as development model—in the Ecuadorian national discourses of *sumak kawsay* and the Citizens’ Revolution are functionally exercises in governmentality and/or environmentality at the local scale—much as the Yasuní-ITT Initiative is revealed to be at the national scale—exercises which ultimately re-articulate and re-inscribe the unequal dynamics of power that create socioeconomic and political marginalization, that facilitate ecological destruction—violations of human environmental rights, in search of the primary goal of institutionalized capitalism: profit maximization. James Ferguson provides the last word:

While the instrumental aims embodied in plans [like postneoliberalism, the Yasuní-ITT Initiative, like *sumak kawsay* and the Citizens’ Revolution] are highly visible, and pretend to embody the logic of a process of structural [re]production, the actual process [of propagating socioeconomic and political inequality, as well

as environmental degradation] proceeds silently and often invisibly, masked or rendered even less visible by its contrast with the intentional plans, which appear bathed in the shining light of day. The plans, then, as the visible part of a larger mechanism [of the oil as development model, a technique of governmentality in the context of institutionalized capitalism], can neither be dismissed nor can they be taken at their word. [1993: 276]

Conclusion: The Anthropologists' Inquiry

A few months after I returned from Ecuador, during an informal discussion with a well-established anthropologist—a gentleman with extensive experience visiting and researching the (lands of the) Other(s)—I briefly described the photographic aspect of my investigation and quickly received the response, “Interesting. But whose pictures were they taking?” This anthropologist was aware that participants knew me to be interested in their (individual articulations with their) ecologies. His inquiry implied that pictures they took, the resources they verbally described, were obviously tailored to meet my interest. A novice fieldworker with pride (approached the point of hubris) in my innovative methodologies, the thought deflated me.

For the next few days I considered re-working my research, eliminating the photographic portion at the very least, which as this *éminence grise* of anthropology implied, seemed to be a simple case of an exogenous ethnographer who manifests privilege, institutionally-sanctioned authority, and an apparatus of surveillance, exercising an influence so great over the participants in the investigation that it overrode their agency—their socioculturally mediated ability to act (Dove 2006: 199)—their ability to express an independent perspective. Despite my shattered ego, perhaps because of it, I began to believe this explanation to be too facile, and began considering its implications.

From this consideration arose two overlapping themes or questions. The first of these focused on the concept of mimesis. If the pictures and verbal information I gathered were simple mimicry of longstanding (inter)national conservationist discourses—Ecuador enacted its first environmental protection laws in 1976 (Fontaine & Narváez 2007: 25)—would that invalidate the ethnographic value of the information? The second analytical theme inspired by the above anthropologist's inquiry is the question of epistemocentrism—the socioculturally mediated

privileging of certain forms or sources of knowledge over others—a question with profound implications related not only to the methodologies created and implemented during this investigation, but also to the question of oil development, human environmental rights, and socio-environmental resilience.

Simple Mimicry?

Mimesis is a two-layered notion. The first and most overt—the sole facet ascribed to the participants in this investigation by the above-mentioned eminent anthropologist—is copying or imitation. The second is a “palpable, sensuous, connection between the very body of the perceiver and the perceived.” Following the logic of this second line of analyzing mimesis, contact and copy merge to become identical, simply different moments in a single process of sensory perception. “[S]eeing something or hearing something is to be in contact with that something” (Taussig 1993: 21). Even if the participants in this investigation were simply mimicking a conservationist discourse in their photography and their verbal responses, the act of producing these images and reflecting upon them was an act of material contact with, and consideration of, resources as defined by longstanding conservationist discourse: flora, fauna, landscapes, waterscapes, sustainable subsistence agriculture, the goods produced from these resources.

To dismiss mimesis as simplistic, uncomplicated, a lack of critical engagement is to consider imitation or copying a manifestation of the trend to “lose oneself in the environment,” in political economies and ecologies, “instead of playing an active role” in them. Mimesis, thus construed, is frighteningly passive, “the self losing itself, sinking, decomposing into the surrounding world” (Taussig 1993:46). If the participants’ responses were solely copies and

imitation, that which was imitated—conservationist discourse, as demonstrated by the high valuation of organic resources revealed in the data—was also reiterated in a contemporary context by Indigenous youth who represent the trajectory of Indigenous culture, and who due to their increasing integration into the market, are more likely than their elders to be viewed as poor stewards of the environment.

Rather than an example of decomposition, of sinking into the political ecologies and economies of the *Oriente*, mimesis via photography is emblematic, verification the existence of that which is photographed, lending authority to the perspective of the photographer (Taussig 1993:199). The Indigenous youth who lent their perspectives via photography expressed their authoritative knowledge of their surroundings, of their political economies and ecologies, by producing images of those surroundings. Photographs taken by those who are most often the subject of photography—those constructed as Others—force the viewer, the reader, or ethnographer, to consider multiple perspectives: Self’s perspective on Self, Other’s perspective on Self, and Self’s perspective on Other’s perspective of Self (Gillespie 2006: 362). Verbal expressions of resource perception and valuation gathered in this investigation are similar expressions of authority by those usually considered Others.

Both the verbal and visual expressions of authority regarding available resources gathered in this investigation were intended to trigger an epistemological re-positioning, intended to inspire consideration of the multiple interacting perspectives. Taussig’s (1993) extensive analysis of mimesis implies that these expressions could be both mimicry of exogenous conservationist discourses and independent critical engagements with locally experienced political economies and ecologies. The anthropologist’s inquiry regarding the independence of participant perspectives in this investigation reflected a much less subtle understanding of

mimesis, its uses, and implications. That inquiry also belied a reflexive lack of recognition of the possibility of authority in the Other, a failure to consider the interaction of multiple perspectives of Self and Other, failure to consider the implications and/of valuations of these perspectives and/or their interactions. In other words, he did not recognize his epistemocentrism.

Epistemology and Ontology: Who Knows What Exists?

“Epistemology was endowed with the power to organize the planet [...] endowed, indeed with the colonality of power” (Mignolo 2001: 435). Discussion of epistemologies and their relation to ontologies can be relatively abstract. A simple hypothetical situation serves to concretize such a discussion as it relates to my research. Imagine I had asked young residents of an upscale neighborhood in the U.S. to photograph the resources they considered important. Imagine their photographs revealed pictures of laptops, cars, cell phones, debit and/or credit cards, cash, schools, supermarkets, and shopping centers. Would the images have inspired the same inquiry: “Whose pictures were they taking?” Would the pictures by U.S. youth have been accepted as genuine expressions of an independent critical perspective, expressions of their subjectivity? I offer that the answers to these questions would likely be “no” and “yes,” respectively.

The contrast between investigative participants and ascription of independent critical authority to their perspectives arise from an epistemocentrism reflecting different ontologies of knowledge—different conceptions of sources and forms of knowledge, of critical authority—and distinct valuation of these ontologies. This is what the term epistemocentrism refers to: a hierarchy of ontologies of knowledge. The immediate inquiry into the independence of the perspectives of Indigenous youth in their photography, the implied inquiry into the independence

of their verbally expressed perspectives, demonstrated an assumed hierarchy of forms of knowledge. “Whose pictures were they taking?” Whose perspective did they adopt? The knowledge in which I was interested as an institutionally sanctioned ethnographer—conservationist discourses—was assumed to have automatically overridden the knowledge that participants would have otherwise expressed. In other words, the anthropologist’s inquiry implied his own epistemocentrism, but additionally suggested that such epistemocentrism had been internalized by participants, either before my interaction with them, or because of it.

This implication denies participants the ability to inhabit a critical “double consciousness” of the type first recognized by W.E.B. Du Bois. Double consciousness, according to Du Bois, refers to a “critical assimilation to Anglo hegemonic culture from and into the perspective of the Black Soul” (Mignolo 2001: 430). The assumption that an exogenous conservationist epistemology was simply imposed upon the Indigenous youth who participated in this investigation denies these youth the ability to inhabit a similar double consciousness. Such an assumption denies these Indigenous youth, Indigenous people in general, the ability to critically accept aspects of a now-hegemonic conservationist discourse from the perspective of Indigenous culture. When I asked the president of the Cofán Federation about conservation, he directly related conservation to Cofán culture, saying, “*Nos interesa la conservación, pero no es para conservar y no más,*” which roughly translates to, “We are interested in conservation, but not only in order to conserve.” He explained the statement by saying that the idea of conservation—concern for ecological protection of local ecologies—is something that Indigenous people have done throughout history as an extension of their culture, not as unreflective imitation of hegemonic conservationist discourses. What he effectively described is contemporary Indigenous double consciousness.

How do the above-mentioned anthropologist's epistemocentrism, and the above expression of nuanced Indigenous environmental consciousness, relate to a discussion of oil development and human environmental rights? How do these relate to the recognition, expression, and elucidation of contemporary political economies and ecologies via the perspectives of Indigenous youth? These are examples of the varied conceptions of knowledge, its applications, and validity—the different epistemologies—in tension in discussions of contemporary political ecologies and economies. Social theory in general, reflects an innovative, daring attempt to change the methods, means, and frameworks of analysis by focusing on what have been called “flat alternatives” (Escobar 2010b: 98). Language used to describe such analytical projects reflects their aim:

flat versus hierarchical, horizontality versus verticality, relational versus binary thinking, self-organization versus structuration, immanence and emergence versus transcendence, enactment versus representation, attention to *ontology* as opposed to *epistemology*. [Escobar 2010b: 98, emphasis added]

Rather than identifying and applying vertically constructed epistemologies (theories of knowledge)—the essence of epistemocentrism—to the socio-environmental context of the *Oriente*, the goal of this investigation was to shift focus to the identification of the resource ontologies—identification of what resources are perceived to exist—of youth who embody the trajectory of Indigenous culture.

Simply stated, rather than evaluating resource existence and valuation using my perspectives, the goal of this investigation was to inquire into what resources are (not) perceived to be readily accessible, the latter being a “flatter” alternative based on recognition of the authority of their perspectives of resource availability and their individual and collective utility or value. The ability to refer to empirical analysis of these perspectives provides a basis from which to discuss preliminary answers to the questions posed in the introduction to this thesis,

answers that rely on endogenous perspectives, that focus on the ontology of resources rather than their epistemologies.

Oil Development, Youth, and Capital

The overall conclusion to be drawn from this investigation is that the oil as development model has failed to address many of the basic needs, to provide for the basic human environmental rights—regardless of both cultural affiliation and level of integration into the market—despite constantly increasing oil rents from expanding oil exploitation which, via environmental degradation, threatens many of the organic resources upon which Indigenous people living at sites of oil extraction depend. Among the older generation of Indigenous people to whom I spoke only informally, the oil complex was nearly ubiquitously considered to have primarily, if not solely negative effects.

Ambivalence from the younger generation, willingness to consider begrudging acceptance of oil exploitation, was surprising. However, almost all expressions of the benefits of oil exploitation that I heard—mainly focused on economic opportunity and on investment in community infrastructure—were consistently tempered with recognition of the potential threats of the industry. Provision of infrastructure, especially related to education and healthcare, were consistently mentioned as the primary potential benefits of the oil complex. However, following over four decades of industrialized oil exploitation, four decades of the promise of ending “underdevelopment,” education and healthcare were considered securely accessible resources by a minimal, almost non-existent fraction of residents of Indigenous communities, those who participated in the investigation as well as those to whom I spoke informally.

The Ecuadorian State continues to assert the validity of its oil as development model,

demonstrated by Rafael Correa’s assertion that his government has never failed. Of all of the people I spoke to in the *Oriente*, only one mentioned the potential of regulating the oil industry as a means of mitigating its negative effects, while securing access to its benefits. Otherwise, people spoke assuredly of the detriments of the industry, of the fact that its benefits rarely manifest in the Indigenous communities of the *Oriente*. The securing of surplus value and unequal distribution of profit are pillars of capitalism, uncritically validated and adulated via the concept of “progress” (Taussig 1980: 23-24), or in the case of the Ecuador and the *Oriente*, the Citizens’ Revolution and oil as development. “Capital, therefore, announces from its first appearance a new [and constantly re-articulated] epoch in the process of social production” (Marx 2001: 246): the promise of improvement. The words of Stefano Varese (2012) are illuminating:

There is no need to go back to Marx to realize that laws—[...] paperwork by congressmen [and presidents] duly elected by the people—constitute a simple programmatic plan to execute looting with an appearance of civility and transparency [...] Nevertheless, the end results are the same: indigenous peoples are dispossessed of their lands [or of the ecological integrity of these lands] [...] occupied for millenia, and of their resources that have been nurtured in a productive way from times immemorial. [Varese 2012: 169]

These are the political economies and ecologies inhabited by the Indigenous youth of the *Oriente*, the de facto conditions under which they live.

Tractable Resources and Resilience

The already established connection between risk and resources is undeniable. In a study of the oil complex in Equatorial Guinea, Hannah Appel (2012) poses a question about risk that is instructive to a discussion of the role of accessible resources in risk mitigation, a term with significant affinity—near synonymy—with socio-environmental resilience. She asks, “To what

extent is the productive, profitable, voluntary risk available to some” like Petroecuador, Petroamazonas, and the Ecuadorian State, “enabled by the destructive and seemingly intractable risk shouldered by others?” (Appel 2012: 703). The displacement by the Ecuadorian State and its proxies of intractable risks of oil exploitation in the *Oriente*—justified with projects of governmentality and environmentality, projects like the Yasuní-ITT Initiative or the Citizens’ Revolution—guarantees the surplus value and is complementary to the unequal distribution of the benefits of oil exploitation. The same risk is shouldered by Indigenous people living at sites of extraction, risk that threatens the physical health and ecological integrity upon which Indigenous sociocultural reproduction depends, where ruptured social networks and pipelines are the price of the profit and infrastructural development that are almost unseen in the *Oriente*.

In the face of intractable risk, tractable resources become risk-mitigation strategies, the fundamental components of resilience following socio-environmental degradation, the fundamental tools for resisting further degradation. Identification of these resources as perceived by residents of extraction sites—those who experience risk—is a critical primary step in fostering resilience. A greater understanding of resource management practices and the logic that guides these practices, combined with historical knowledge of temporal and spatial distinctions in ecological feedback and thresholds—both of which are informed by investigation of resource perceptions—can contribute to expanding understanding of anthropogenic landscapes (Lu 2010: 15-16) like those produced by oil exploitation activities.

Riding in a motorized fiberglass canoe down the Aguarico River through the Cuyabeno Faunal Reserve toward Zábalo, I was surprised by the constant presence of oil barges, the presence of a large Petroamazonas base, complete with flood abatement walls and a helicopter. The barges bore names like *Aguarico* and *ITT*, were painted with toucans and forest scenes, clear

examples of greenwashing of oil exploitation activities with conservation discourses. Oil exploitation in the contemporary *Oriente* expands consistently, constantly. Hybrid political economies and ecologies are continuously being (re)created. Indigenous people are constantly required to respond to these (re)creations, adjusting practices of resource management and sociocultural reproduction.

A well-known component of Cofán ancestral material culture is a peccary tooth necklace worn by males. The examples of these necklaces that I saw each contained at least thirty canines from collared peccaries, meaning that each necklace represents at least seven individual animals killed. The meat is obviously consumed and the canines, some up to three inches long, are used to in creating the necklaces. In a minor example of the sociocultural change sparked by environmental degradation resulting from proximity to the oil complex, young men who I interviewed in Dureno—the high-MI Cofán community which is the site of one of Ecuador’s earliest, an highest producing industrial oil wells—mentioned that because peccaries are becoming increasingly scarce, many of the “teeth” on newly-made necklaces are carved out of wood. When I asked Josiah, my translator in Zábalo—the low-MI Cofán community—if people there ever made the necklaces out of wooden teeth, his response was a resolute, “No.”

Rather than relinquish an integral facet of material culture, people in Dureno demonstrated resilience, a sociocultural adjustment to changing ecological conditions. This minor example is replicated in the resource-management plans about which I was told in Zábalo. Hunting on the bank of the Aguarico River across from the community has been prohibited in order to ensure a faunal population sufficient to serve as tourist draw, in effect, a commoditization of that population. In order to ensure a viable, self-sustaining population from which to harvest different species of monkeys and birds, also caimans, families in Zábalo are

limited temporally, quantitatively, and qualitatively in their hunting activities. These strategies, although limited in scope, demonstrate effective management of ecological resources by Indigenous people, an ability effectively recognized by the Ecuadorian Ministry of the Environment via its “*Socio-Bosque*,” or Forest Partners program, initiated in 2008, a program in which the residents of Zábalo participate.

The program, intended to limit deforestation and ensure biodiversity, offers the community financial incentives in exchange for conservation efforts. Superficially, the program seems like mutually beneficial interaction between the State and Zábalo, demonstrated by the fact that while I was in Zábalo, I witnessed the delivery of a few landscaping tools—to facilitate community work gatherings, or *mingas*—as well as two outboard motors, purchased with *Socio-Bosque* funds. Program funds were slated to buy a small outboard motor for each family in Zábalo, also to contribute to the reinstatement of the *charapa* project that provided economic opportunities to numerous community residents.

Closer analysis of the program reveals a few tensions. Gasoline remains exceedingly difficult to acquire in the rural *Oriente*. Additionally, according to Zábalo’s president, a primary problem was that although the program provides much-needed funds to the community, those funds are contingent upon preventing community members from harvesting organic resources, both floral and faunal, from the areas the community is paid to protect. In light of the fact that organic resources were consistently mentioned as the most valuable, most securely accessible—the most tractable—of those resources perceived by young people, to exclude them from accessing these resources in exchange for monetary compensation—money which according to this investigation is not perceived to be a tractable, valuable resource—is a simple case of exchanging a resource with high use value (organic nature) for one with low use value (money).

Keeping the goal of fostering resilience in mind, of doing so amidst what seems like inevitable expansion of oil the oil as development model, maximizing access to and utility of the resources considered most valuable is arguably of critical, if not utmost, importance.

Morality, Epistemocentric Development, and Human Environmental Rights

A discussion of a shift from a common property rights regime to State land management in Southwestern China elucidates the tensions of exogenously managed integrated conservation and development projects (ICDPs) like *Socio-Bosque*, the Yasuní-ITT Initiative, and arguably the oil as development model as a whole.

[V]illagers, whose rights to use forest resources are determined [or threatened via contamination] by outsiders, find themselves in the unique situation of being alienated from the decision-making system while at the same time being responsible for enforcing that system. The introduction of a market economy [via oil exploitation or otherwise] has increased [...] demand [on natural resources] beyond sustainable limits. [Swope et. al 2011: 57]

Before continuing analysis of this statement as it relates to oil development and human environmental rights in the *Oriente*, it is important to note that ecological integrity—an aggregation of intact forests, high biodiversity, and uncontaminated land and water, among other factors—is a natural resource with a use value equal to, if not greater than, the value of the natural resources that constitute its component parts.

Indigenous nations of the *Oriente*, like the Cofán and Huaorani, control relatively large swaths their ancestral territory, control which is widely asserted to guarantee the ecological integrity necessary for their sociocultural reproduction. More accurately, these groups control the surface of their territory, but have no control over the subsurface. Such a dynamic belies an epistemocentric model of develop in which ecological integrity over a temporal scale—the *longue durée* of conservation—is subsumed to notions of progress and modernity. Control over

horizontal spatiality in the absence of control over vertical topography is arguably a further projects of governmentality, intended to provide discursive validity to notions of Indigenous autonomy, while ensuring the epistemologies of modernity, progress, and profit—those that justify the displaced risks of oil exploitation—are the de facto determinants of actual conditions.

There is nothing inevitable [or accidental] about the [risk or existence of] degradation and destruction of indigenes and ecosystems through contact with “civilization” and “economic development.” *It is a moral choice* made by policy makers in government, bank, and corporate offices in [...] [Ecuador], the United States, and other countries [China, for example], as well as a result of public apathy. [Sponsel 2011: 132, emphasis added]

We return to the question of morality. Dysfunctional governance is imbricated with the culture, structure, and morality of power, as much as it is constrained by economic needs (Johnston 1995: 116). Development projects—like oil exploitation—have long been justified via their intentions (Ferguson 1994: 255), despite the fact that such projects often exacerbate the problems they intend to solve (Johnston 1995: 118). However, their failure often functions (intentionally or not) to re-inscribe and expand the power of the institution administering development programs, which are almost always justified with morally defensible goals like addressing poverty and deprivation (Ferguson 1994: 255-256). In terms of the oil as development model constantly expanding in the *Oriente*, the question of its success has been answered in the negative via analysis of data and academic literature in this investigation. Likewise, the moral bankruptcy of the epistemocentric oil as development model—bankruptcy demonstrated via continuing and continuous violations of human environmental rights—has been affirmed. The fact remains that this development model has only functioned to strengthen and embolden the Ecuadorian State, and continues to be justified with moral discourses like plurinationalism, the Citizens’ Revolution, and the *sumak kawsay* doctrine.

Now What?

Analysis of both the academic literature and the field data has yielded two primary conclusions that are admittedly pessimistic: 1) the Ecuadorian State only discursively acknowledges Indigenous human environmental rights, as well as environmental conservation, while in practice these remain effectively unattended; and 2) oil exploitation—a direct threat to physical health, ecological integrity, and Indigenous sociocultural reproduction—continues expanding without sign of abatement, even in legally-recognized Indigenous territories. Disheartening to say the least, these conclusions underscore the need to further analyze and foster socio-environmental resilience in communities that are ethnically, socioeconomically, and politically marginalized as are Indigenous communities, that are sites of hydrocarbon exploitation or are otherwise ecologically compromised. A basic step, one embraced by this investigation, is to begin by identifying not only the risks that are present in these communities, but also the symbolic and material resources already available to them. Doing so is effectively identification of the tools with which communities can re-build, and a means of targeting conservation efforts.

Identifying resources is a primary step, but by no means a sole solution. Is it possible to appeal to the morality of petrochemical executives and others who profit from oil exploitation in the *Oriente* or elsewhere? Adam Smith answered that question long ago. Is it possible to extract capitalism from Latin American socioeconomics and politics, create a new system as postneoliberalism in Ecuador claims to do? Capitalism, coloniality, and modernity (the provision of which is often a moral justification of development) are interrelated. The Americas as a “geosocial construct” emerged in the sixteenth century. That emergence was the constitutive act of modernity, the first development project funded through resource extraction. “The Americas

were not incorporated into an already existing capitalist world economy. There could not have been a capitalist world economy without the Americas” (Quijano and Wallerstein 1992, quoted in Mignolo 2001: 433). Capitalism and the Americas are mutually constitutive. Eliminating either seems unrealistic. “There is no indication that people in the advanced capitalist countries [or advanced capitalist regions of “developing” countries] (apart from the usual malcontents) are looking for a radical changes of lifestyle” (Harvey 2010: 218). The most clearly apparent direct challenge to the capitalist model of production seems to be public insistence upon accountability—via public protest, academic investigation, journalism, and political action—of the oil complex. Such accountability may contribute to making contamination unprofitable, making accountability an appeal to the primary, if not sole motivation, of institutionalized capitalism.

Regarding possible approaches to overcoming the obstacles posed by the nearly inexorable oil as development model in Ecuador, academia contains numerous suggestions, most of which focus on increasing both the autonomy—territorial and political—of marginalized communities, and increasing accountability for the historically problematic aspects of oil exploitation. Succinctly stated, there are numerous reasons why community participation is not a “second-best” option. Those who live in sites of socio-environmental conflict—Indigenous communities in the *Oriente*, for example—provide continuity in monitoring of ecological degradation and subsequent social change, provide the most trenchant evaluations of this change. Local participation makes residents of sites of socio-environmental conflict less vulnerable—more resilient—in the aftermath of ecological degradation or disaster. Solely top-down, exogenously administered development increases such vulnerability, decreasing resilience (Wisner 2011: 324). Longitudinal analysis of perceptions of available symbolic and material

resources, in combination with longitudinal analysis of perceptions of risk, are in effect a form of monitoring the widespread effects of socio-environmental conflict.

Taking multi-generational perspectives into consideration when analyzing the dynamic impacts of socio-environmental is another critical facet of effective analysis and potential restructuring of the oil as development model specifically, or generally speaking, of ICDPs that bring distinct epistemologies into conflict. This investigation focused on youth, as youth provide insight into the trajectory of a particular group. However, the perspectives of elders, not addressed directly in this investigation, provide longitudinal insight into socio-environmental change and its causality. In the absence of historical scientific monitoring of ecological change and its social effects—as is the case in the *Oriente*—the perspectives of elders represent “a vital and nuanced source of on-the-ground conditions in the region” (Crate 2011: 415).

Despite the need to include grassroots or “bottom-up” perspectives in analyzing and attempting to remedy socio-environmental conflicts, the need for effective policies—effectively implemented—persists, despite the fact that this is particularly challenging in the context of institutionalized capitalism in general, but especially when the institutions and practices that cause socio-environmental conflict are proxies of the State—when the rule takers are the rule makers—as is the case with the Ecuadorian State and Petroecuador, its subsidiaries and subcontractors. Discussion of potentially beneficial changes to policy managing the oil complex is informed by a discussion of policy changes needed to resolve other socio-environmental conflicts (Barker 2011: 368; Johnston 2011b: 446). Some of these changes include:

1. Granting community residents the legal ability to define contamination, without temporal or geographic boundaries.
2. Providing healthcare for all people who live and/ or work in or near

hydrocarbon extraction sites, transportation, and derivative production facilities (hereafter referred to as “exploitation activities”), with “near” defined by those seeking healthcare.

3. Multiple plans for remediating contamination, eliminating contaminants until levels are equal those considered acceptable in wealthy urban centers.
4. Consistent monitoring by multiple independent agencies of exploitation activities.
5. Increased legal capacity for those living in sites of exploitation activities to define what constitutes a local risk and/or resource.
6. Creation of a fund for consistent infrastructural development, especially educational and health services, for those living in sites of exploitation activities.
7. Training of Indigenous doctors, scientists, lawyers, petroleum engineers.
8. Epidemiological study of the effects of oil-related contamination and exploitation activities in general.
9. Review existing means of medical and environmental monitoring
10. Independent and transparent environmental impact reports produced by multiple organizations, distributed in sites of exploitation activities.
11. Involve people who live in sites of exploitation activities in the design of environmental and medical investigations of the effects of these activities.

This final point suggests a more general consideration central to the discussion of socio-environmental conflicts among marginalized populations: “The simple act of asking questions, listening, and recording” experiences and opinions functions to empower these communities

(Johnston 2011b: 369). This investigation was intended to extend this logic, to ask questions, listen and record subjective experiences in order to analyze those experiences empirically and formulate arguments based on that data, in order to challenge the uncritical acceptance of the hegemonic discourses of the oil as development model, plurinationalism, environmental rights, and *sumak kawsay*.

Whose Intelligence?

On my second day in Zábalo, I sat down to my first conversation with Josiah, the young man who worked as my translator. As I explained the goal of the investigation, the interview process as I envisioned it, I was extremely proud of myself: the National Science Foundation funded my fieldwork in the Amazon, fieldwork for which I prepared for months, doing academic research and investigating tents, polyester shirts, and digital cameras for the best cost to quality ratio, creating interview forms and mentally considering permutations of this thesis. But as we spoke, I began to get the distinct impression that Josiah felt the task was going to be onerous at best, at worst, an outright annoyance.

For him, it was a job. About a dozen years ago, I worked for nine months in a clothing store where whenever I had to close the store, which was often, I had to vacuum the dressing rooms. Once while doing so, I calculated that with my minimum wage salary, completing that onerous task earned me about one dollar. Soon afterward, I quit. As I spoke to Josiah, I was reminded of that job, and became convinced that the look in his eyes must have been similar to the look in my eyes as I pushed the vacuum over the gray carpet. For four or five days of translating, I would pay Josiah nearly the equivalent of a month's pay at his job of maintaining and turning on the community's generator every night. He was annoyed, but was not going to quit. I would not have quit if I made more at vacuuming.

When I finished talking, he looked me in the eye and said, “*Nosotros los Cofanes tambien somos inteligentes*” (We the Cofán are intelligent too). “*Si tu tuvieras que pescar aqui...*” (If you had to fish here...). As he trailed off, I realized the impression I had made. I had conveyed epistemocentrism: pride in my knowledge and failure to recognize the valuable knowledge of the Other. His statement forced a repositioning, forced me to become conscious of his perception of my perception of him. Stated (somewhat) more simply, I became conscious of the Other’s perception of my Self perception of the Other, of the fact that I had unintentionally insulted him by speaking so proudly of what I knew without recognizing what he knew.

Triggered by the seriousness in his eyes, by the fact that he trailed off mid-sentence, I quickly recognized my mistake and finished his sentence (“If you had to fish here...”) by saying, “*Me muero de hambre*” (“I would die of hunger”). Josiah laughed. I breathed a sigh of relief and did my best to express my interest in the knowledge that he and other residents of Zábalo possessed. During the twenty-minute conversation that followed we discussed the presence of Petroamazonas upriver in Playas de Cuyabeno, where the company disbursed money directly to the community’s adult residents. Clearly conflicted over the presence of oil exploitation, over the vast change happening in the town, including the provision of employment opportunities, our conversation ended soon after he made a statement reflecting his ambivalence, one quoted in the ethnography section of this thesis: “*Ahora vivimos en otro mundo. Todos necesitamos dinero.*” “Now we live in another world.” The statement has broad implications. The value of distinct perspectives, of striving for flat alternatives to hierarchical epistemologies, recognized in new forms of social theory, would be integral to another world, one striving to restructure rather than propagate current political economies and ecologies that produce marginalization and contamination.

During the community meeting in Zábalo where the reinstatement of the *charapa* project was being discussed, I sat listening quietly, trying to parse meaning out of rapidly spoken *A'ingae*, occasionally doing simple math calculations offered to me by the community's president, I believe out of a kind-hearted attempt to include me. Midway through the meeting Josiah was standing near me, speaking in *A'ingae* to one of his friends. In response to one of the friend's questions in *A'ingae*, Josiah responded in Spanish, I believe for my benefit: "*El man es inteligente. No más que no quiere decir nada,*" meaning, "The guy is intelligent. It's just that he doesn't want to say anything." They were talking about me, about why I was sitting silently at the meeting where an important socioeconomic aspect of community life was being discussed. I was quiet specifically for the reason that Josiah mentioned. It was not my issue. I sensed the approbation in his statement, something which I still consider a sign of the fact that by being quiet, by just listening, I did something right.

In another world, things would be different. The structures that have ecologically devastated Ecuadorian Amazonia would be disassembled and rebuilt, the same structures that exclude Indigenous people from autonomy over important natural resources, that obviate secure access to the human rights that the State is responsible for providing. In another world, discussions about the socioeconomic, political, and ecological trajectory of a marginalized community subjected to the oil juggernaut would be predicated upon simply accepting expressions of their experience. In another world, this simple respect—epistemological equity and ontological acknowledgement—in ethnography, scholarship, activism, and development would be considered basic, a starting point and the map for initial paces. Despite the pessimistic tone often struck in this thesis, and the trite tone of the statement, I believe that—through dedicated scholarship and activism—another world is possible.

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Appendix A: Participatory Tenables Mapping Protocol

Person being interviewed: _____

Age: _____ Sex: _____

Household size/composition: _____

Community of Residence: _____

Ethnicity: _____

Interviewer: _____ Date: _____

Part I:

The first part of the interview consists of listing and then ranking the tenables—material or symbolic resources—which the interviewee values. These may be financial or material assets, but they can also be cultural traditions, personal qualities, common property goods, social relationships, places, or activities.

Tenables, important things, things of value (unranked)

Ask the interviewee about the things that they consider important. Ask probing general questions about people, places, things. Important market activities or goods, health care, education, social activities, subsistence activities, and conservationist practices are all relevant responses. Summarize lengthy discussions. Any particular tenable mentioned should be included. This is a free-listing and does not involve ranking.

a) _____

b) _____

c) _____

d) _____

e) _____

f) _____

g) _____

h) _____

i) _____

j) _____

Part II:

The next step is asking the interviewee to rank the tenables in terms of value or importance to him/her. Note any discussion of reasoning behind the rankings.

1) The thing that the person thinks is most important:

2) The thing that the person considers next most important:

3) The third most important thing is:

4) The fourth most important thing is:

5) The fifth most important thing is:

6) The sixth most important thing is:

7) The seventh most important thing is:

Part III:

Ask the interviewee if they are doing anything to acquire more tenables, or to make the tenables they already have more beneficial or more productive. Do they shift cultivation or hunting patterns? Are they buying or trading different things? Are they eating different foods or seeking medicine to stay healthy? Have they moved? Are they seeking work or education? Are they part of any organizations?

Part IV:

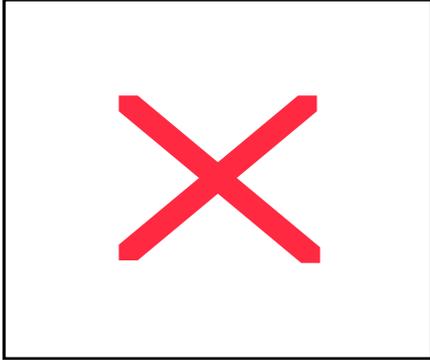
Next, ask the interviewee about how they maintain access to the things they consider important. What do they do every day that is related to these important things? Have they moved to a location where tenables are more secure? Do they work to maintain access to these important things? Are there rules about these things? What are some of these rules? (Conversely, why are there no rules?)

Appendix B: Visual Free-Listing Protocol

What is pictured in the photograph?	Academic Use Permitted?	Public Display Permitted?	Publishing Permitted?
1.			
2.			
3.			
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Appendix C: Participant Photography

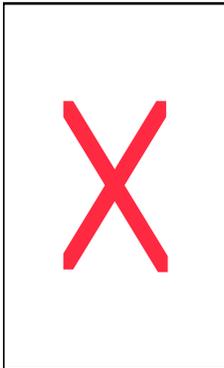
Natural Resources



Subsistence Crops/ Social Reproduction



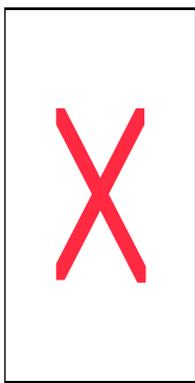
Landscapes



Material Culture



Market Goods/ Activities



Infrastructure/ Services

