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Enskilled Bodies, Chronic Illness, and Autonomy Among
Miskitu Lobster Divers In Atlantic Nicaragua

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy in Anthropology

by

Clinton Dean Humphrey

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ABSTRACT OF THE DISSERTATION

Enskilled Bodies, Chronic Illness, and Autonomy Among
Miskitu Lobster Divers In Atlantic Nicaragua

by

Clinton Dean Humphrey

Doctor of Philosophy in Anthropology

University of California, Los Angeles, 2016

Professor Christopher J. Throop, Co-Chair

Professor Paul V. Kroskrity, Co-Chair

This dissertation explores the contractions, expansions, and movements of bodies, ailments, and forms of moral personhood among Miskitu lobster divers in Caribbean Nicaragua. It tracks the ways in which illnesses come into being and persist for commercial lobster divers through their *enskilled* navigations of undersea sentient ecologies, and examines the interconnections between structural and symbolic violence and embodied perceptual processes. Suffering is demonstrated here as a phenomenon articulated through the fluctuating capabilities of the enskilled body and the collapse and expansion of social and material worlds. As the lobster industry has slowly collapsed, so have the bodies and lived worlds of thousands of men who suffer from chronic decompression sickness as they dive deeper to find the product using

insufficient equipment. Despite the dangers of this labor, many of these men are able to continue this kind of work for several years. Drawing on my ethnographic research among these divers, and an array of phenomenological themes, I argue that if we are to gain a better understanding of how these men are able to endure this painful and dangerous commercial work under the sea, we must first track how they re-attune their sensoriums for the underwater world through the use of specific cultural tools (technologies) and an array of embodied practices that afford a certain control of the body, as well as a unique way of attending-to and monitoring its conditions. These divers generate perceptions of their labor and illnesses through culturally mediated forms of embodied interaction—the work practices themselves—and in so doing reconstitute a morally charged sense of self (re)oriented towards an array of vulnerabilities and broader ethical concerns, emerging from local manifestations of structural and symbolic violence. The growth of undersea sensorimotor skills initiates the situated possibility of perceptually grasping oceanic phenomena with "for me" qualities and instantiates a self infused with a sense of capability and control, even as they contend with illness on a regular basis. The undersea environment is thus opened-up in-the-doing as an inhabitable space into which one can extend sensorially to intentionally body-forth and exert agency. These lobster divers are attempting to manage their illnesses and economies as they simultaneously commit themselves to other issues that are vitally important to them, such as maintaining control over their own bodies in the labor market, and empowering the ethno-political status of Miskitu people as a minority group in Nicaragua.

The dissertation of Clinton Dean Humphrey is approved.

Charles Goodwin

Philippe I. Bourgois

Christopher J. Throop, Committee Co-Chair

Paul V. Kroskrity, Committee Co-Chair

University of California, Los Angeles

2016

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CHAPTER 1

INTRODUCTION

It would be more appropriate to envisage mind as extending outwards into the environment along multiple sensory pathways of which the cane, in the hands of the blind man, is just one. Thus while Bateson shared with Levi-Strauss the notion of a mind as a processor of information, he did not regard processing as a step-by-step refinement or repackaging of sensory data already received, but rather as the unfolding of the whole system of relations constituted by the multi-sensory involvement of the perceiver in his or her environment.

(Tim Ingold 2000:18)

1.1 - An Anxious Anthropologist

17 miles northeast of Corn Island, roughly 65 miles off of Nicaragua's Southern Caribbean Coast:

"How do you feel?," I asked. Andre pulled the scuba mask from his face and stood up in the skiff as it rocked gently from side to side. Still dripping with seawater, he arced his body to stretch his lower back and then looked over to me with a big smile, "I feel good," he said. I continued to probe, "Is the water cold here, do you feel tired?" "No, no the water is good.

Lobster here!," he exclaimed with certainty. The entire Miskitu crew was now smiling, "motorman," "bubble-man," and "diver." The forth crew-member, the ethnographer, could only manage a nervous grin. Andre was hunting lobster in an exceptionally deep habitat on the East Bank (80-130 ft.), known among Island residents as a particularly hazardous undersea environment for local divers. The seasoned diver clasped his hands and raised them high above his head to stretch his shoulders. He had brought up eleven large lobster on the last dive—his eighth dive of the day —and as the bubble-man quickly prepared a tank of air for a ninth descent, Andre took a closer

look at the large pile of dead lobster lying on the deck of the skiff. He estimated the total catch so far at twenty-two pounds. On this day the Caribbean Sea was relatively peaceful, the catch was already well into the profit range, and Andre still had four full cylinders of air to continue his undersea hunting. Each additional pound of lobster would mean greater amounts of cash-in-hand at the end of the day, but from my own perspective, each tank consumed at these great depths only increased Andre's chances of injury or death. The crew sensed my growing uneasiness and responded with some subtle goading, amping-up their merriment in a playfully exploration of my anxiety. "Dinner tonight, okay?," asked Andre. I agreed. "No diving tomorrow," he added to ease the tension.

I had gone out to sea dozens of times with Andre and his crew to study and record their dive practices, but up to this point in time I had never accompanied them to this region of East Bank. Just one year earlier, Andre had experienced a devastating dive accident near this same location. He has described the accident to me as the most horrific ("most horrible") moment of his life. On that tragic day, he was ascending from his seventh dive when he began to suffer from some mild dizziness. Upon surfacing his condition quickly deteriorated, his dizziness transforming to a dangerous disorientation while still in the water; he then felt a deep sharp pain in his lower back as the crew pulled him into the skiff. Lying semi-conscious on the deck, he struggled to speak coherently and maintain a sense of place, his throat and neck stiffened, his legs began to harden and numb, the pain in his back persisted with increasing intensity. He was losing all control of his body. Even more terrifying was the sense that his spirit was in jeopardy of leaving his body! Recognizing the symptoms of decompression sickness (aka: "the bends"), his crew quickly prepared another tank of air and placed him back into the sea, so he might

descend to a fifty-foot depth and recompress the problematic excess of nitrogen expanding in his body. Despite suffering from severe disorientation and profound disruption in sensorimotor function, he was able to descend with the help of his crew and a weighted rope they had thrown over the side of the skiff. Desperately grasping the rope in a state of bewilderment and paralyzing pain, Andre hovered alone under the sea at varying depths for roughly forty agonizing minutes until regaining some cognitive lucidity and most of the normal functionality of his limbs.

Notwithstanding the incisive actions taken that day by himself and his crew, Andre now suffered some residual effects of the accident in the form of partial paralysis in his right leg. He dived with a "crippled leg" and walked with a subtle but noticeable limp. I was deeply troubled by Andre's decision to dive this location again, and given my knowledge of his history at this site, my anxieties in the ethnographic present seemed "well grounded," so to speak.

On this particular day at East Bank, however, Andre seemed unaffected by the threat of injury, despite experiencing some expected stiffness and mild aching in his back, hips, and shoulders. On Andre's ninth dive he surfaced with fourteen more lobster, and after passing them off to the bubble-man, he barked at his crew to quickly prepare another tank so he could dive on a teeming rock directly below. The bubble-man was swift indeed, quickly passing the tenth tank over the skiff's rail to an impatient diver bobbing alone in the sea. In a single motion Andre took the tank in front of him, rolled his body forward, and disappeared under the surface in a matter of a few seconds. We followed Andre's undersea navigations with careful attention to the trail of his expiration bubbles reaching the surface—the first responsibility of the "bubble-man." When the bubbles concentrated in one location, it signaled a pause in undersea navigations because the diver had ambushed an enclave of lobster. "Killin, killin, boy," Andre's brother Teo

shouted excitedly in the local vernacular of Creole English while holding the tiller of the outboard motor. My concern was only that the bubbles simply continue to surface, as I had heard many stories of lobster divers being "lost," their bodies disappearing under the sea, never to be recovered. Andre's expiration bubbles were getting larger, an indication that he was surfacing, but it was an unusual ascent in its slowness; and when his body became visible near the surface it was in an odd position, face down and not moving much. I quickly stood up to get a better look, and just at that moment Andre raised his face out of the water and shouted to Teo, "Mark this here!" Andre then re-submerged his masked face, apparently to take one last look at the relevant undersea phenomena he wished to record. Teo, still holding the tiller in his left hand, began entering information into the small GPS he was holding in his right. Raising his head out of the water again, Andre declared, "It's time to go home." He would not exhaust the two remaining tanks of air and continue his hunting. I sat back down in relief.

The bubble-man lifted Andre's catch over rail and threw them atop the large pile of dead lobster on deck. Andre then pulled himself aboard and the crew began preparing for the trip back to Corn Island. I inspected the video cameras I kept mounted to the skiff to insure their security during the bumpy ride home and then pulled a water-resistant notebook from my dry-bag to record some assessments of the day's events. The stressful experience of watching Andre successfully dive East Bank that day provoked me to reassert and re-interrogate some of the most fundamental questions of my research, the most obvious and pressing being: (1) why does he continue with this painful and incredibly dangerous vocation that nearly killed him, and (2) how is Andre capable of enduring such grueling dive practices day after day for eight years? These two basic questions pointed back to an even larger question that pervades so many medical

anthropological studies: In what ways should this research advance beyond the confines of "disease etiologies," to track complex ontologies of illness and distinct articulations of suffering in this socio-cultural context?

After watching Andre dive East Bank, I took pause to seriously question where I might locate his pain, paralysis, and endurance. If not reduced to decompression theory and an objectivist rendering of physiological processes, how should this research go about describing the origins and persistence of this disease as a debilitating condition and situation affecting Miskitu lives? Taking Andre's experiences into account, it would be neglectful to exclude biological processes and the physics of deep-water diving in impending analyses—as exemplified in the opening narrative of this chapter. That said, if we turn a critical eye towards the corporate and industrial apparatuses that assist in organizing this dangerous work and commodifying it's product, we are quickly reminded that "lobstering" in this context, reaches far beyond the dangerous depths of East Bank. After all, Andre's hard-won lobster will most certainly leave the country to be consumed by people who lend distant support to his labors with the dangerous naïvety they demonstrate in regard to their dinner's origins. ¹ In consideration of these facts, it becomes important to ask, if the more salient forces underlying Andre's sufferings are to be found in globalized capitalism, reckless neoliberal economic policies, and the human rights and ecological sustainability problems that currently plague this industry and the international seafood market more generally (see Bestor 2001; Dodds 1998; Ingles and Sepez 2007; McGoodwin 1990).

This market-level state of affairs supports important components of the problem, but if they were to become the primary analytical course taken here, the focus on these large-scale processes would need to take into account that most Nicaraguans, despite their economic hardships, have not considered taking-up the dangerous work of lobster diving—as revealed in the overwhelming condemnation of the industry by non-Miskitu citizens over the last several years.² The ethnographic narrative here should be careful then not to portray Andre as an oversimplified representative of that massive homogenized population often referred to as the "exploited global poor." What is it about Andre's particular situation within his cultural environment that has made him differentially vulnerable within various levels of social organization in his nation, community, and family, and how do the reconfigurations of his vulnerabilities demonstrate not only local patterns of inequity, but also the unique ethical alignments lending powerful influence in his navigations of these patterns? It is clear in this context that there is a need to compliment a study of harmful globalized systems with careful examinations of national, regional, and local historical processes that connect to enduring patterns of racism, social hierarchy, and economic inequality through multiple channels of interaction; but conjoined with these ambitions must be a recognition that each Miskitu diver employs their own moral compass to skillfully navigate this multilayered confluence of social, political, and economic forces. This dissertation will argue, for example, that Andre's ambition to gain some *control* over his own body and livelihood is as equally relevant as "scarcity" and "economic insecurity" when attempting to discern his vulnerabilities and answer why he continues with lobster diving.

This issue of experiencing *capability* and *control* through the growth of specific embodied skills—through *processes of enskillment* (Ingold 2000)—is in fact an analytical centerpiece of this dissertation. The topic is especially important because these sensibilities are

grown into divers through the same bodily movements, engagements, and interactions that generate perceptions of the ailing body and underwrite courses of action in times of illness. The body, is therefore the answer to my earlier question of where to "locate" Andre's illnesses, sufferings, and endurance. This study of the body, however, is not restricted to the objectively removed, biomedically conceived notion of the corporeal body and it's interdependent parts often referred to as the körper by phenomenologists. Rather, this research will highlight the roles of bodily movement and interaction within richly structured cultural environments to demonstrate processes of enskillment, and how embodied selves come to know and experience their worlds. ⁴ The process of enskillment is one where sensory modalities are directed to relevant phenomena through semiotically mediated social interaction to establish attentional dispositions and perceptions of the environment to facilitate the accomplishment of culturally significant projects. In the way this process becomes held in the body and no longer needs to be reflected upon, the process of enskillment produces a tacit embodied knowledge that is brought to subsequent interactions. Embodied knowledge structures how we navigate our worlds and assists in directing courses of action in such a way that they "feel right" and sensible for individuals.⁵ Therefore, *capability* and *control* is best understood here as a morally charged sensibility grown into divers through culturally mediated embodied practices that shape sensory orientations, perceptions of the environment, and experiences of the ailing body, as well as the ways in which one comes to navigate precarious situations and imagine a better future.

At this juncture, some readers familiar with current theories of embodiment in the social sciences might begin to question the feasibility of analyzing those broader systems and social patterns mentioned earlier, in addition to the "experience-near" approach presented in the

paragraph above. 6 How can this dissertation possibly integrate such a multifaceted approach in one ethnographic study? But how can it not? If Andre's sensorium, perceptions, and experiences are indeed shaped by way of his embodied navigations of his environment, as I will argue in this dissertation, then how can we not consider the importance of broader socio-political, economic, and institutionalized patterns in providing some structure, form, and organization to his interactions? The *materiality* and *sociality* of lobster diving in this context—manufactured skiffs, available dive equipment, crew coordination, etc.—become possible and are taken-up within the structure of the current seafood industry, therein directly affecting the embodied practices that are the focal point of this research. At last then, with recognition of the multilayered approach required to move forward, we come to the central aim of this research: As a course towards tracking complex ontologies of illness and examining distinct articulations of suffering in this socio-cultural context, this research advances detailed, fine-grained analyses of embodied selves in motion, actively attuning their sensoriums and coming to perceive and understand the undersea environment and their ailing bodies through uniquely structured practices at sea. The notion of "illness ontologies" here is not equated with "disease etiologies,"—the process of tracking the biological and social causes of disease prevalence—nor is it related to recent ambitions to create elaborate data bases of "disease ontologies," where diseases become conceptualized through explicit mappings of physiological relationships to other known disease phenomena. This research is focused more intently on "illness," with explorations of the ways in which pain, trauma, and disease, are configured and experienced though our embodied practices and socio-cultural navigations of a local moral world (Kleinman and Kleinman 1991; Kleinman 1988). In this dissertation, "ontology" denotes the process of illness coming into being as an

experienced phenomenon that contributes to unique articulations of social suffering. Sociocultural and political-economic processes at multiple levels introduce a distinct materiality
(technologies, for example) and social organization to this labor, profoundly influencing forms of
engagement, sedimenting fields of navigation, giving structure to movement, and transforming
interactions to actions that generate patterned somatic orientations and morally charged
sensibilities over time.

In regard to those fundamental questions posed earlier, this dissertation will offer detailed examinations of exactly how men like Andre accomplish their work to better understand why they continue with it. Why is this research approach important? Scholars and practitioners representing a multitude of health-oriented disciplines have become efficient at accumulating propositional knowledge of afflictions from both folk and scientific perspectives, resulting in productive cross-cultural understandings of disease etiologies, "belief systems," and risk behaviors (see Adams 2016; Biehl and Petryna 2013; Farmer et al. 2013; Kohrt and Mendenhall 2015; Nichter 2008; Singer and Erickson 2013). What we know much less about are the ways in which tacit, non-propositional, embodied knowledge of illness directs courses of action; this research aims to demonstrate how that embodied knowledge comes into being through specific forms of movement and semiotically mediated interaction, and thus, how illness comes into being and changes for those experiencing it. Below, I clarify and expand upon the three levels of analysis contributing to the multilayered framework of this research: (1) structural violence, (2) moral configurations of vulnerability, and (3) the embodiment of capability and control. Ultimately, the aim is to demonstrate the ways in which each of these analytical levels interweave with embodied (inter)actions and thus how lobster divers come to perceive their

illnesses and experience their sufferings. After presenting the multilayered approach embraced here, I then move on to a more theoretically detailed treatment of embodiment that prioritizes how structured movement and forms of interaction lend to *processes of enskillment* and forms of *embodied knowledge*.

1.1.1 - Violence: Structural and Symbolic

In the earliest stages of my research it quickly became clear that the daily troubles these divers confronted emerged not just from the chronic pain associated with excesses of nitrogen saturating their bodily tissues, but also from a complex assemblage of interconnected social, political, and economic forces that could bring intense struggle to their daily lives (see Ong and Collier 2008). Nearly all of the divers I interviewed described a steadfast dedication to their families and a deep motivation to keep the most damaging products of wide-spread poverty from corrupting their households.⁸ To do this, divers explained, one would need to earn cash by finding the lobster; however, to find the lobster, one would have to first find an entry point into the precarious fishing industry of the Caribbean Coast. When describing this process, the divers themselves point to the important structural factors contributing to the current form of their work and it's associated illnesses. 10 Moreover, they understand the current form and force of contemporary structural conditions and hierarchies of power as inextricably tied to historical processes involving interactions between the nation's various ethnic groups, political parties, socio-economic classes, and religious organizations, as well as Nicaragua's evolving relationships with other nations of the world (see Bourgois 1981, 1982, 1988, 1989; Dozier

1985; Diskin 1989, 1991; Garcia 1996; Hale 1987, 1994, 1998; Ohland and Schneider 1983; Pineda 2006; Vilas 1989).

After nearly a decade of civil war and the subsequent expulsion of U.S. imperialism and associated trade policies, Nicaragua once again reconfigured their participation in the globalized capitalist market system with a potent collection of neoliberal policies introduced in the early 1990s. The goal was to stimulate the stagnant post-war economy and create new economic opportunities for people struggling to endure in one of the poorest countries in the world. At this time foreign and domestic investors began tapping the Caribbean Coast's lucrative seafood resources with renewed fervor (Meltzoff and Schull 1999; Nietschman 1997). Seeking to minimize the costs of labor and infrastructure, and maximize profits in short-order, entrepreneurs and associated agencies sidestepped implementing important regulations and began employing the economically stressed population of indigenous Miskitu people along the Caribbean Coast. Through the 1990s, the harvests steadily increased to satisfy the insatiable appetites that North Americans and Western Europeans hold for inexpensive lobster. The increased production brought significant profits for those people in the highest positions of the business and modest earnings for many of those with the capital to invest in a sufficient boat and the needed gear (motor, rope, lobster traps, etc.). It was during this time of rapid and chaotic change that the current form of lobster diving emerged as a large commercial industry in Nicaragua, initially attracting Miskitu men who did not have ready-cash to invest in their own small scale operations. As the years have passed, the structure of the industry has proven ecologically unsustainable and decreasing lobster numbers meant that divers must go deeper and stay under the sea longer to find the commodity, greatly increasing their chances of suffering from decompression sickness.

This brutal industry has, unfortunately, continued for nearly three decades without effective foreign or domestic intervention.

If we take these historical processes into account, the epidemic levels of death, paralysis, and chronic illness resulting from decompression sickness along Nicaragua's Caribbean Coast could be understood as emerging from what Paul Farmer (1992, 1999, 2004) refers to as *structural violence*, an oppressive system of social and material relationships controlled by institutions and collectivities of people who wield favorable distributions of power (see also Galtung 1969). Those populations with much less sociopolitical and economic leverage, residing just beyond the reach of modernity's promises and the eyesights of mystified foreign consumers, engage with fewer medical, educational, and health-sustaining resources and thus suffer higher rates of morbidity and avoidable diseases (cf. Farmer 1992, 1999, 2004; Baer *et al.* 2004; Singer and Baer 1995)

If *structural violence* is indeed the crux of the problem for these divers, one might be tempted to let the fundamental *how* and *why* questions presented above collapse into each other and address them both within a single explanation: a violence is being perpetrated upon the Miskitu people by a broader world order. These divers engage in these incredibly dangerous labors because their situation at the social periphery offers little room for economic mobility and drastically constrains their choices, chances, and access to vital local and global resources. They dive for lobster and endure their hardships until they can dive and endure no more, and because the processes underlying unequal distributions of power and resources are durably patterned, global in scale, and perpetually at work, we should understand the structural perpetration of this violence upon the Miskitu lobster diver as relentless, even if it can manifest somewhat covertly.

Many of the fundamental premises of the *structural violence* explanation would surely resonate with the Miskitu divers I worked with on Corn Island.

The divers I interacted with often linked the "divin problem" to the Miskitu people's historically militant opposition to "Spanish" (Mestizo) encroachment from the West, typically viewing the exploitive and dysfunctional aspects of the Caribbean fishing/seafood industry as primarily the result of corruption, governmental ineptitude, and corporate greed—most of these problems understood as originating in the nation's capital, Managua, located on the "Pacific side" of the country¹¹ (cf. Baracco 2005, 2011a; CIDCA 1987; Hale 1994; Nietschman 1989; Ohland and Schneider 1983). As proof they point out that among the three predominant ethnic groups on the Caribbean Coast, the other two being large Mestizo and Creole populations, it is only Miskitu men who take on the dangerous occupation of diving for lobster—mostly out of economic necessity they argue. Miskitu people are also keenly aware that the Caribbean Coast people have become economically dependent on the lobster industry, and that while their labor practices link them to foreign consumers, those distant consumers generally demonstrate an unawareness or indifference towards the lobster diver's plight. Researchers, journalists, and humanitarian writers have taken-up this narrative and given serious analytical attention to the political-economy of the Nicaraguan lobster diving industry and the wide-spread suffering it has inflicted upon Miskitu men and their families (see Amador 2010; Demko 2005; Kleeman 2011; Malkin 2011; Ring 1992; Tassi 2004; Wyss 2002).

A reoccurring plot line in many of these narratives follows the desperate Miskitu man confronting his own poverty by making the regrettable decision to enter into an industry that offers dilapidated and insufficient scuba gear, negligible training, hazardous unprofessional dive

practices, inadequate health care resources, impersonal corporate relationships, and apathetic employers and government officials who turn a blind-eye to the struggles, injuries, and deaths of Miskitu workers whenever possible (see Wolff 2012). While these strategic discourses surrounding the issue have successfully demonstrated that political-economic and structural violence paradigms provide insightful analytical frameworks with which to track and examine the processes contributing to Miskitu suffering, it also appears that much of the associated research on this topic has become increasingly narrowed in this context, with a focus on four interrelated themes: (1) the primitivity of the dive practices, (2) the credulity of the divers, (3) the culpability of administrators and associated national institutions, and (4) the obscured destructiveness of a globalized capitalist system. The narrowed focus has facilitated a strategic affectivity in these narratives, promoting sympathy for the divers while confronting some of the more visible issues. Paradoxically, this perspective has also at times produced broad stroke illustrations of Miskitu lobster divers, therein over-simplifying the character of these men and the complex ways that they manage their labors and illnesses. These divers have most often been portrayed—sometimes implicitly—as unknowledgeable and unskilled scuba divers who live in perpetual states of fear and despair because of the damaging and dangerously unpredictable character of the work they perform out of sheer necessity (cf. Dunford et al. 2002; Izdepski 1994; Jacobson 2004; World Bank 1997).

Descriptions such as these typically fail to capture how the intricate web of social relationships in Andre's life, his directed-ness towards the things he finds most important, and the tacit embodied knowledge that he brings to his work to successfully perform it and make sense of it, assist him in confronting distinct contextually meaningful manifestations of

vulnerability and serve to direct his courses of action when assessing the dangers and pains of his labor. From a more pragmatic perspective, these narrowed discourses are ready-made for recontextualization by non-Miskitu Others who can easily infuse them with racial stereotypes to construct divers as ignorant, impulsive, and dangerously defiant. Such discourses take-hold and perpetuate because they fold into and link-up with histories of symbolic violence—a process that naturalizes systems of inequality by essentializing the presumably flawed character of the victims, who can then be assigned the blame for their historical misfortunes because of their innate deficiencies and resistance to modernity¹² (see Bourdieu 1977, 1990, 2000; Bourdieu and Wacquant 1992; Bourgois 1995). The context of this research serves as a reminder that structural violence and symbolic violence are best not treated as separate entities or processes, but are rather two analytical principles that can help distinguish mutually reinforcing components of a larger process adversely affecting the social and material conditions of people's lives. When I evoke the notion of structural violence in this dissertation, I do so with a presumption that the symbolic and the structural are always intricately interwoven. 13 This approach is exemplified in the way vulnerabilities and suffering are treated in this research as emerging from both the material deficiencies brought about by political-economic circumstances and the specific forms of symbolic violence that influence the moral orientations of people who must navigate this broader "field" of relationships influenced by a regional manifestation of structural violence (Bourdieu 1977, 1990).

1.1.2 - Moral Navigations of Vulnerability

An examination of the narrowed discourses mentioned above reveals that the explanatory power of the structural violence paradigm is diminished when it is treated as a monolithic form of oppression bringing sickness and blocking the path of a group of people presumably needing to move more rapidly towards modernity and its technologies (cf. Bourgois and Scheper-Hughes 2004; Green 2004; Wacquant 2004b). ¹⁴ I propose, however, that the approach is significantly enhanced when researchers track how structural violence connects to and reconfigures emerging forms of vulnerability and their inequitable distributions across regions, communities, and families. In many ways, all of those people living under the difficult conditions of structural violence are positioned in a place of vulnerability; yet, it is equally important to remember that the process of becoming "vulnerable" unfolds in a local context, where the situated-ness of undesired change reveals it as problematic relative to what is understood as morally significant or "what really matters" to local people (cf. Mattingly 2014; Kleinman 2006). Some of the most dangerous kinds of vulnerability develop as people actively re-orient to undesired change, uncertainty, and the inequitable susceptibility it engenders for those in particular situations (see Scheper-Hughes 1988). As an experienced phenomenon, vulnerability is more than a greater potential for discomfort, insomuch as it can itself become an enduring feeling of uncertainty relentlessly pressing itself upon individuals and families with oppressive force (see Hinton 2005; Kleinman 2006; Mattingly 2010). When the experience of vulnerability becomes an enduring psychological and social condition bringing anxiety, chronic stress, emotional instability, and trauma to people's daily lives, it transforms to suffering, ostensibly without a causal "event." It can initiate forms of recoil and social withdraw in individuals attempting to protect themselves

from what *could* happen, or become reconstituted through social processes as a phenomenon with less destructive impact in order to disempower the looming potential to be harmed (Das 2007). To this last point, many Creole and Mestizo residents on Corn Island speculate that this is what lobsters divers may be doing; that is, some think divers unconsciously reify the labor as something less dangerous in order to quell their anxieties and divert their attention away from the extreme uncertainty and abject conditions they must face on a daily basis. These folk theories of diver experiences align with similar discourses in the community depicting Miskitu people as having an uncanny ability to ignore "reality." Locals sometimes point to the "primitive" beliefs held by Miskitu divers—belief in malevolent mermaids, for example—to further demonstrate diver rejections of modernity and scientific rationalism (cf. Parent 2001; Hale 1994; Jamieson 2002). My data does not support these local perspectives, and I will argue that Corn Island lobster divers have elaborate understandings of diving that compliment complex forms of tacit embodied knowledge.

In this research, vulnerability is revealed as something permeating the multiple layers and facets of social and material lifeworlds, constantly threatening to slow or halt one's movement towards the good and bring about suffering (Mattingly 2014). Vulnerability is therefore generated *and* confronted through moral orientations, ethical stances, and enskilled ways of bodying-forth within this context of structural violence. Patterned forms of vulnerability are certainly reproduced within the hierarchical "structures" of the seafood industry in Caribbean Nicaragua, and they are indeed "further conjugated through ethnicity" in this context; but to better understand courses of action within this system, we must also weigh the importance of ethical stances and moral orientations as they interface with the industry's structure and local

historical processes (cf. Holmes 2011:447; Bourgois 1988; Leatherman 2005; Quesada et al. 2011). 15 The Miskitu families and individuals I worked with on Corn Island yearn to experience themselves moving toward a good life as they themselves define it. The person-centered methodology adopted in this research (Levy and Hollan 1998)—as demonstrated in the opening paragraphs describing Andre's experiences—combined with a focus on the details of social interaction, will allow for "first-person" insights regarding the ways in which divers and their families negotiate vulnerability and the "demands" of ethical trajectories and moral becomings within a community (Arendt 1958; Mattingly 2014:12; Throop 2010). Lobster divers are attempting to manage their safety and health as they simultaneously commit themselves to the things that are important to them, including but not limited to: maintaining control over their own bodies in the labor market, sustaining valued social relationships and configurations of family, actively empowering the ethno-political status of Miskitu people as a minority group in Nicaragua, and the practical development of their ability to govern their own livelihoods and futures. In further exploring how the multilayered-ness of these ethical issues are re-shaped and confronted in the daily lives of Miskitu people, this research attends to three important aspects of morality recently identified by Jarrett Zigon (2011:66): (1) the institutional, (2) public discourse, and (3) embodied dispositions; moreover, impending analyses tack between the broader propositional character of "ethical concerns" within the Corn Island community and the more tacit aspects of embodied moral orientations (Zigon 2008, 2011). These men take dramatic steps to gain some control over their lives through the development of specific capabilities developed through their embodied engagements with the social and material worlds in which they live. 16 Das and Kleinman (2000, 2001) have evoked the notion of the "soft knife" when describing how

state policies and institutions can work slowly, and even somewhat covertly, to erode the cohesiveness of communities and bring suffering to families and individuals. From a historical perspective, the development and perpetuation of the lobster diving industry in Caribbean Nicaragua could be seen as an example of the soft knife. But in the way lobster divers and Miskitu communities have recently presented themselves as both capable *and* oppressed in this industry while actively seeking justice, fairness, and their "rights" to live as they choose, they demonstrate how this soft knife might become double-edged and cut both ways.

These observations should remind us that under the umbrella of structural violence, vulnerabilities manifest differentially, and people confront, navigate, and experience their troubles by way of their own moral orientations. From a Global Health perspective, tracking these navigations can offer insights into why some people are more "at risk" than others within a single community, but this tracking may also explain *how* some people come to manage their adversities and ailments more or less effectively than others within those oppressive qualities of structural violence. ¹⁷ Can we expand our understanding of lobster diving as something more than a simple culmination of depravity, desperation, and ignorance, and consider that at least some of these men are actively attempting to confront their vulnerability and establish forms of control in some aspects of their lives, even as the labor makes them vulnerable in others? An important aim of this dissertation is to explore how divers become differentially vulnerable and capable in times of trouble though their navigations of structural violence and how it links-up to the ways in which people come to know and experience themselves, their sufferings, and their moral worlds through embodied interaction and particular attunements to their lifeworlds (see Hollan 2012).

1.1.3 - The Embodiment of Capability and Control

Looking back on the anxious day described in the opening paragraphs of this chapter—when Andre was diving East Bank—he, unlike myself, appeared to be level and confident, even joyous during the last few dives of the day. He embodied steadiness, certainty, and control, and performed his labors at sea with a veteran's shrewdness. It was not unusual for him to describe himself as poor, and he often cursed the quality of his scuba gear along with the lack of professional training available to lobster divers. During such moments of disclosure it became clear that Andre did not lack a *critical consciousness* in regard to broader oppressive processes (cf. Baracco 2005; Calderon 1983; Freire 1973, 1990; Miller 1985; Ortega 1983). By his own accounts and comportment, however, he did not experience himself as dwelling in a perpetual state of ineptitude, despair, or victimhood, brought unto him from ceaseless structural forces outside his control. Unquestionably, he longed for access to more of the "developed world" and it's technologies. His painful successes in finding the lobster lent support in his rejections of victimhood, just as they reminded him of the profound vulnerability he experienced as a motivated Miskitu husband and father living under the weight of abject poverty.

That evening of the anxious day at East Bank, Andre and I met at a local restaurant for dinner. I was eager to find out how he was feeling after such an arduous day of diving and committed to an exploration of how he was able to accomplish such a feat in the first place. Most of my questions, however, were met with simple short replies that provided me with few additional insights regarding his dive practices and undersea experiences. I asked, for example, if he was fearful while diving East Bank since it was the location where he had injured himself. "No, I know how to dive there, everything was good," he replied. "How do you do so many

dives and go so deep and not have an accident," I asked. "You have to be careful. You have to know what you are doing," he answered. Yearning for more detailed "information," I pressed my inquiry about specific dive practices, but each of my questions received surface responses. What did become evident to me over the course of our interaction that night, however, is Andre's subtle-yet-persistent confidence in his skills. He resents relegating his labors exclusively to the precarious industry of lobster diving and the struggles it entails; yet, at the same time, he experiences some satisfaction in diving for lobster. He knows he is good at it—I know it too. The type of diving he is practicing—the high number of descents per day, the extreme depths, the insufficient equipment—is simply too demanding for a reckless or unskilled diver to accomplish day after day. His success and perseverance is grown of more than luck and economic desperation; the complexity of his motivations are constituted by something auxiliary to ineluctability and deprivation. Besides, by his own admission, Andre does have other economic options. He could take to using lobster traps with his father and three brothers—the way that the vast majority of lobster fishermen on Corn Island and Nicaragua's Caribbean Coast produce their catches. Or, he could work the plot of land that his parents control in a mainland village where many of his extended family still live. These options are continually dismissed by Andre as not only less lucrative, but also a poor fit for his personal strengths and independent spirit. More than once he broke it down in straightforward terms as we talked on the subject; "me, I'm a diver," he would assert with enough conviction to effectively shut down suggestions of alternative labors.

What I have come to understand through my research among seasoned Corn Island lobster divers, is that most of these men realize themselves first as capable, and this orientation—as manifested within a local context of profound economic struggle and ethical commitments—

provides a particularly powerful influence in directing actions and decisions associated with the pains and dangers of this industry. But if we take a diver's sense of capability as an essential ingredient in explaining why these men continue with their punishing occupation, and we simultaneously refuse to reduce this seemingly over-assured sense of self as stemming from irrational "cultural beliefs" (see Good 1994), then again, I believe the important problem becomes where to locate and track the growth of this sensibility? With an aim at advancing some foundational concepts developed in phenomenological and action-centered theories of perception, I maintain that the "I can" orientation of these divers is constituted through processes of enskillment (Ingold 2000) and held in the body as tacit embodied knowledge of undersea navigation and lobster hunting. These divers re-attune their sensoriums and generate perceptions of their labor and illnesses through culturally mediated forms of embodied interaction—the work practices themselves—and in so doing constitute a morally charged sensibility that tacitly directs courses of action when encountering undersea dangers and contending with illness.

1.1.4 - Integrating Paradigms

Recognizing the ways that structured environments mediate processes of enskillment is a reminder of the importance of attending to political-economy and cultural patterns in this research. Moreover, the notion that processes of enskillment re-formulate an embodied sensibility in divers, reminds us that divers are doing more than "learning" how to attend to their bodies and illnesses, but are also re-fashioning their sense of self and forms of engagement in the broader socio-political and economic world in which they live. When Andre indicates that he experiences himself as capable with statements such as, "you have to know what you are doing,"

he also demonstrates how sensibilities constituted largely through his embodied practices at sea are brought into his social environment discursively—a community where much of the population believes that he, in fact, has very little understanding of deep-water diving. To gloss his evaluations of his own skills as *machismo* would grossly misconstrue the sense of capability we are examining here. Nor should his evaluations of capability be treated as knee-jerk rebuttals to those who believe him incompetent. Those sensibilities Andre has forged largely at-sea are morally charged in part because they allow him to body-forth and navigate a socio-political and economic environment in addition to the undersea world; a local environment he must navigate as he simultaneously manages his ailments.

The broader social environment, undermined as it is by the vulgarities of structural violence, persistently threatens to halt his progress. This is, in addition to his orientations towards *the will* of others, perhaps the first order of vulnerability in his life (cf. Garro 2010; Butler 2005, 2006, 2011). "Life is hard" for the vast majority of Nicaraguans—the work opportunities "brutal," in the words of many lobster divers (Lancaster 1992). As a capable lobster diver, Andre experiences himself *moving toward* a future with a fragile ability to insulate his family from the most damaging aspects of wide-spread poverty. But this moral experience of movement, of bodying-forth, reinforces, and to some extent reconfigures more pervasive and *long-held ethical commitments* that Andre brought to his self-training as a lobster diver (MacIntyre 1981). Perhaps the most important of these commitments is an enduring ambition to protect his personal autonomy, or gain control of his own body, in a seafood industry largely controlled by non-Miskitu Others. As a "skiff diver" living on Corn Island, Andre feels somewhat in control of where, when, and how he will dive. 18 Many Miskitu men have explained

how they are seen as disposable by non-Miskitu bosses and captains, who hire them to overwork their rugged bodies and then abandon them when those bodies begin to fail. Such experiences are as much about "moral breakdowns" (Zigon 2007, 2008, 2011)—important moments of moral reflection regarding appropriate responses—as they are about economic insecurity. This sense of racial hierarchy and exploitation in connection with a yearning for autonomy is yet another layer of vulnerability, perhaps a second-order form. It stems from a long history of (sometimes violent) Miskitu struggles for Caribbean Coast Autonomy in Nicaragua and the continuous competition between the nation's ethnic groups for control over natural resources, job opportunities, and governance. Importantly, the issues presented above also provide examples of how Miskitu bodies become objectified and symbolically meaningful as racial, controlled, rugged, resilient, disposable, etc., through interactions with others on Corn Island. These morally charged interactions can bring Miskitu men to diving while influencing the ways in which Miskitu people thematize their own bodies (see Coates 2015; Fassin 2007); but as we will see in later chapters, orientations to the body can also become re-articulated through the processes of lobster diver enskillment, a process that can change how one orients with the body (Csordas 1993, 1994a).

This research will follow how this striving for a sense of personal autonomy and control, and it's connections to specific forms of vulnerability and ethical commitments, reaches back into history and forward into anticipated action and imagined futures. A deeper analysis in forthcoming chapters will demonstrate how these issues, along with many others, become interwoven into embodied action, perception, and moral sensibilities. A stated aim of this research is to track how dive related illnesses come into being, proliferate, and persist in this socio-political context. To answer that question, we must ask *why* Miskitu men continue to dive

for lobster. The examples above clearly connect this question to historical events and interactions, current forms of structural violence, ethical alignments, and emerging forms of vulnerability, adding a multilayered complexity to the question and expanding the analysis beyond "desperation." My aim is to weigh the significance of these issues without forgetting that most divers do indeed find themselves in incredibly desperate situations at times. Novice divers weigh their ethical commitments in addition to immediate economic necessities when deciding to become a skiff diver, and they re-orient themselves towards such commitments as their enskilled bodies re-constitute their sense of a moral self and enable new forms of engagement in their local worlds (Taylor 1989). They navigate ethical possibilities, both explicitly and implicitly, and even in all its potential to destroy lives, men have the "freedom" to harness differential "technologies of the self' through their embodied practices as lobster divers (Foucault 2000a, 2000b, 2000c). Political-economy directly influences the materiality and sociality of a cultural environment, and thus the elaboration of the embodied practices that are central in constituting enskilled selves. In this research, enskillment is an interactive process of coming to know and experience the body, its illnesses, and the environment, through an attentional attunement that facilitates one's orientations towards, and integrations into, a broader sentient ecology. The process is also one in which an individual comes to constitute a moral self oriented towards an array of vulnerabilities and broader ethical concerns in his lifeworld. Below I describe the methods and theoretical paradigm developed in this dissertation, and then situate the research among past ethnographic works on the body and embodiment.

1.2 - Embodied Experience and Enskillment

When Miskitu men begin training themselves as deep-water divers, they must contend first with the body's complete destabilization as they enter into the unique undersea environment. Limbs flail as the body twists and turns in attempts to find stability and balance. Movements become random and undirected because of severe proprioceptive disruptions that make limb positions and bodily placements very difficult to evaluate. In these early days, the novice diver experiences the undersea environment as closing-in on him, as the sea stifles, disrupts, and confines the capacity to anticipate and act. In response, they have no option but to focus their attention on reestablishing some of the most taken-for-granted aspects of "being-in-the world," such as the ability to breathe effectively, maintain balance, and accomplish controlled movements. Mastering specialized technologies (cultural tools) in conjunction with specific embodied practices, assist in generating the navigational skills needed to accomplish their job skillfully. I am proposing that this process culminates for these divers in the unique way they come to know the environment and their own bodily conditions. Miskitu lobster divers (re)attune their sensoriums and (re)pattern "somatic modes of attention" (Csordas 1993, 1994a) through culturally mediated interactive practices, and therein enact unique perceptual experiences of visceral and environmental undersea phenomena (cf. Verela 1999; Noë 2004, 2010; O'Regan and Noë 2001). Appropriately then, much of the analysis in subsequent chapters will begin with the moving-body-in-context, locating undersea perceptual processes in social practices, as they shape, and are shaped by, a dynamic embodied know-how that enables one to navigate a culturally elaborated terrain. It is the growth of undersea sensorimotor skills that initiates the situated possibility of perceptually grasping oceanic phenomena with "for me" qualities and

environment is thus opened up in-the-doing as an intersubjective space into which one can extend sensorially to intentionally *body-forth* and exert agency. ¹⁹ This formidable otherworldly location is transformed and integrated into lifeworlds brimming with practical concerns and imagined possibilities. The re-generation of the skilled body engenders new horizons, and with an eye towards these horizons, seasoned Miskitu divers experience themselves as motivated, agentive, and able to get the job done.

This unique circumstance of having to orient and attune to the undersea world, where so much of one's tacit embodied knowledge—needed to produce effective action—is rendered inadequate, offered a unique starting point to track how divers went about re-shaping their perceptual experiences and embodied ways of being in the world. Illustrating this process of attentional attunement offers distinctive forms of data that can advance current theories of embodiment. Moreover, it directly informs the way I explore suffering in this context and demonstrate it as an inability to body-forth and toward meaningful horizons (see Crapanzano 2004). Below I briefly review some important themes pervading anthropological works on embodiment and the senses before moving on to the unique use of enskillment in this research.

1.2.1 - The Anthropology of Embodiment and the Senses

By evoking the notion of *enskillment*, I mean to point to the embodied *process* of sensorial attunement that structures one's attentional dispositions, subsequently contributing to the generation of perceptions and experiences of visceral and environmental phenomena.

Embodied knowledge is the tacit cumulative effects of this historical process as it becomes held

in the body, the result being the body's capacity to orient and perform in certain ways without one having to explicitly or thematically attend to the details of its complex performance. The body "knows" how to maneuver and dynamically emplace itself to accomplish the task at hand (Wacquant 2004a). This process produces a *sensibility* in people, patterned ways of interacting in the world and perceiving it that come to be experienced as both natural and socially appropriate; thus, there is always an important moral component generated through enskillment and grown into embodied knowledge. In large part, I borrow not only the term enskillment from Ingold (2000), but also his articulation of it as a theoretical precept supporting his ideas regarding perception—a social theory that foregrounds the ways in which ecologies of interaction shape attentional orientations.²⁰ That said, I cannot claim that my use of the term always follows his original definition and intent (see Chapter Three). In this dissertation, the term *enskillment* is always used as a verb to refer to processes underwriting a mindful-body coming into being (Lock and Scheper-Hughes 1987), embodied knowledge being it's epistemological status at any given moment in time based on a history of structured interactions (cf. Bourdieu 1977, 1990; Leder 1990). A social and material world in motion makes this process a dynamic one where unique forms of agency emerge, while the habituated and durably patterned aspects of our cultural lives keeps much of what the body knows relevant in our daily navigations of the world (cf. Csordas 1994a; Ingold 2000; Noë 2012).

Importantly, from the perspective proposed here, it is not simply an interaction between the unique physical characteristics of the ocean and the distinctive challenges they impart on the sensory mechanisms of the physiological human body that shapes perception and an experience of the underwater world. In this way, this research diverges from much of the work conducted in the biological and natural sciences. This research does align with much of the research in cultural phenomenology, the anthropology of the senses, and "embodied-mind" paradigms, in that I do not regard perception as *only* the result of neurological impulses sent to the brain by five (or more) separate sensory mechanisms—exteroceptive and interoceptive collections of sub-personal data to be processed internally as a means for creating representations of objects and events in the autonomous mind (cf. Clark 1997, 2008; Csordas 1994a; Varela et al. 1992; Howes 2005). Such studies take an isolationist approach through controlled abstractions, their analyses building on a removal of "the body" from its lifeworld to study it as an object. In contrast, the impending analysis will remain relatively close to Csordas's succinct definition of perception as "the cultural uses and conditioning of the five external senses plus proprioception (our sense of being in a body and oriented in space), as well as what Kant (1978 [1800]) called the inner sense of intuition or sensibility" (1994b:4-5). Though this may seem a nominal definition at first reading, and one that certainly deserves an interrogation regarding the assumption of only five senses (see Classen 1993, 2012; Geurts 2002; Howes 2003, 2011), if we explore even the surface of its implications, it quickly becomes evident that demonstrating this rendering of perception can be a complex task for an ethnographer.

Exploring "the cultural uses and conditioning" of the senses, for example, proposes that we locate perceptual processes in social interactions and activities, as they shape, and are shaped by, a dynamic embodied know-how that enables one to navigate a culturally elaborated terrain; "pre-given," it is a world of others into which we are thrown and must navigate as essentially intersubjective beings (Husserl 1962 [1913]). Perceptual processes thus depend on specific forms of practical engagement with the world, through which sensory modalities become structured,

organized, and integrated for individuals in ways that correspond with distinctive orientations of the body and patterns of attention to facilitate the accomplishment of socially meaningful projects and moral ways of being in the world (see Geurts 2002). Csordas (1993, 1994a) has identified these culturally elaborated ways orienting and attending to and with the body as "somatic modes of attention." As with many ethnographers interested in the interplay of culture, sensation, and perception, he invites researchers to identify and track sensory attunement and function by focusing on the cultural patterning of the participating social body-in-context to gain insights on different ways people come to attend to phenomena, articulate embodied processes, and evoke sensorial experiences through certain cultural aesthetics (see also Desjarlais 1992, 2003; Feld 1982; Jackson 1983a, 1983b; Stoller 1989, 1997). At the root of such arguments, then, is the premise that we cannot locate our perceptions, thoughts, and emotions in the workings of a disembodied mind containing representations, or through an extensive mapping of neurological impulses, but instead must ethnographically examine the constitutions of embodied selves in their navigations of the shifting configurations of context that underlie their indeterminate character. A phenomenological approach to sensory perception and experience thus necessarily calls for examinations of selves that never rest full states of development and completeness. Our embodied immersions and movements in an intersubjective world continually enacts new profiles and horizons for participation, perception, (self-)reflection, and experience (see Designal and Throop 2011).

Despite having a profound influence on anthropological studies of illness experience and healing, I believe that the theoretical tenets supporting the phenomenological paradigms presented above have proven difficult to employ as a structured methodology.²¹ The version of

embodiment theory I advance in this research foregrounds and prioritizes the roles of movement and semiotically mediated social interaction—within structured environments—in shaping the senses, perceptions, and illness experiences (C. Goodwin and M. Goodwin 2004; C. Goodwin 2000, 2003). The process of attuning one's sensorium here is, in the words of C. Goodwin (1994: 606, 607), situated and "lodged within [an] endogenous community of practice," where "complex perceptual fields" are interactively established through collaborative elaborations of semiotic materials; some undersea "phenomena relevant to the activity are made salient" while other "phenomena fade into the background." This point of departure separates the research from most other ethnographic studies of embodiment and the senses produced by sociocultural and psychocultural anthropologists. The early chapters of this dissertation, for example, do not begin with presentations of linguistic terms and classifications of sensory modalities provided by informants. Many studies taking this approach then go about determining interrelationships between representational orders to demonstrate a patterned system of meaning and the ways in which a particular group comes to orient towards phenomena and embody a pervasive, culturally distinctive sensorium through symbolic actions (cf. Geurts 2002; Hallowell 1955; Good 1994). Although much of the research utilizing such methods has proven to be exceptionally productive within medical anthropology and beyond, my research took a different route primarily out of necessity.

Verbalizing the details of work practices and undersea sensorial experiences proved to be tremendously difficult for lobster divers. The details of their undersea work practices—so skillfully accomplished—were located somewhere below their *discursive consciousness* (see Giddens 1984; Kroskrity 2000). This inspired an ambitious use of video at-sea, and undersea, to

facilitate collaborative evaluations of what exactly they were doing and feeling while working. It also initiated a rigorous form of participant-observation on my part that involved following research participants into the sea as they performed their work. In this research there is an unusual priority given to the materiality of the body, its "fleshiness," as Merleau-Ponty puts it, and the sensorimotor skills and forms of engagement harnessed to "enact" the presence of phenomena (see Noë 2004, 2012).²² In the impending chapters, the Language of the research informants is never treated as a discrete system with an overriding power to represent and give symbolic meaning to experience and world's objects. When integrated into analyses here, language is treated as part-and-parcel of a broad range of embodied practices and semiotic resources, elaborated and meaningful as they emerge cooperatively within a structured material setting (see Goodwin 1994; Duranti and Goodwin 1992). As such, linguistic practices do not stand alone and merely refer to things, but become involved in a broad range of communicative practices and semiotic modalities directing orientations of the body and the ways in which we come to attend to phenomena (see Ochs 1988; Schieffelin 1990; Schieffelin and Ochs 1986; Duranti 2009). Have embodiment theorists overemphasized representations of illness offered in interviews when they set out to reveal relationships between culture and experience? Most medical anthropologists promoting the methodological advantages of embodiment and phenomenological paradigms have reminded us that the immediacy and rich complexity of lived experience always outstretches the representational capabilities of language. At the same time they have been forced to temper this ambition to explore the tacit and pre-objective configurations of illness experience with recognitions that discourse is still their primary source of ethnographic data. I believe my intense focus on the details of embodied (inter)action can add

something significant to ethnographic methodologies and offer new perspectives that will compliment current pychocultural-anthropological research on illness experience in anthropology. Like the research citied above, my approach is inspired by the classic phenomenological works, that in my view, have always encouraged a focus on movement and interaction.

1.2.2 -Movement and Embodied Interaction in Phenomenology

A key ingredient in the theoretical formulation of perception offered here can be traced back to Husserl's (1962 [1913], 1964) pioneering phenomenological explorations of consciousness. A critical insight offered in his works claims that one's perception of objects presupposes an embodied capacity for movement. When we apprehend an object we perceive it as immediately for more than the limited profiles accessible from where we happen to be positioned in relation to it. That one could move and see the other profiles is an essential part of the immediate perceptual experience; there is a horizon of inaccessible profiles that nevertheless co-exist for me when perceiving an object, thus configuring its presence and meaningfulness in relation to spatiality, temporality, and the kinesthetic intentions of myself and the others around me. This foundational idea has become an essential building block for broader phenomenologically inspired notions of imagination, empathy, (co-)intentionality, and (inter)subjectivity, in the way it proposes that objects are perceived consciously and originally in pragmatic relationships between ourselves and others in the context of lived experiences and direct plans in a socio-cultural environment. In this formulation, perception is inextricably tied to (possibilities of) movement, and movement generated in the mist of projects and the horizons

they engender for future action. Consciousness is not an interior process present unto itself, but is always *of something*, open and directed outward into a world in motion. Subsequent expansions and reformulations of Husserl's thoughts on pure consciousness questioned more critically the separability of consciousness from one's pre-conscious immersion in a cultural world navigated in social collaboration.

Underlying Heidegger's (1962 [1927]) complex version of *dasein*, for example, is the notion of a person's immediate and essential integration with their environment—a "being-inthe-world" that precedes subject-object relations and even consciousness. We are "thrown" into and so inseparably implicated in the world, in its envelopment and immediacy, that our attitudes towards everyday cultural artifacts are shaped by a "ready-to-hand" pre-objective proximity to ourselves. Much of the world and its things become effaced to an extent that they are experienced as extensions of ourselves as we orient attention to practical everyday achievements. Even the body itself often becomes effaced for us when it moves and performs as we expect it to during routinized activities (Leder 1990; Wacquant 2004a). We typically need not focus our attention to the details of each embodied operation during our daily maneuverings through the world. Heidegger's thoughts regarding the fundamental nature of existential experience and its inseparability from the world therefore denies a theoretical compartmentalization of consciousness, as well as the duality of mind and body, and challenges researchers to reveal phenomena such as "self," "other," and "object," as they mutually re-constitute each other and emerge from a largely pre-conscious navigation of relationships. His ontology thus emphasizes the dynamic "reciprocity of our being" and in so doing calls for an exploration of the essential relational processes that shape the ways in which the world discloses itself to individuals (Morris 2008:114). Importantly, the theoretical insights of Husserl and Heidegger presented above were taken-up by Merleau-Ponty, and it is his re-workings of these phenomenological themes in particular that provides us with a locus and starting point for the impending analysis of Miskitu dive practices and perceptual experiences.

Merleau-Ponty posited that the relational processes underwriting one's being-in-theworld emerge from and dwell within an interacting self-in-the-flesh. Human subjectivity is first and foremost embodied subjectivity, animate and ever-moving through patterned interrelationships that constitute a lifeworld. Never merely an object located in space for the acting subject, the body in its fleshiness and obdurate materiality is the moving-locus through which the self can *inhabit* time and space to actively generate orientations and sensations that inform Husserl's "aboutness" and "wholeness" of perceived objects. Like Husserl before him, Merleau-Ponty finds an intentionality inherent to perceptual experience, but his is a *motor intentionality* of the body enacted as it navigates an anticipated world that is continually reshaping itself. A perceiving body is always an animated and integrating body, dynamically extending—or "bodying-forth"—into a structured environment of which it is always a part (cf. Bateson 1972 [1955]) . This focus on movement and ecologies of interaction should encourage anthropologists interested in phenomenology to reevaluate the use of the three most important concepts they have borrowed from Merleau-Ponty's works on perception. These include: "indeterminacy," "pre-objective" experience, and the notion that we come to "know the body through the body."

In this dissertation, the notion *indeterminacy* is highlighted in the explicit ambition to track the ways in which perceptions of the ailing body come into being through engagements and

interactions. As Csordas (1993, 1994a) has pointed out, Merleau-Ponty argued that perception is a process that ends in objects. The ambition of this research is to demonstrate embodied processes that reveal illness in a certain form for individuals. Beginning with representations of illness, rather than the immersed and interacting body, has the potential to direct the focus of the researcher to the object (the illness) and its local meanings, without tracking how representations emerge from and change through our embodied navigations of the environment. In regard to the second of the borrowed concepts, the focus on "tacit embodied knowledge" in this research explicitly connects to the notion of pre-objective experience. By my own estimation, research in the social sciences has too often treated "the body" as a metaphor, symbolic representation, or proxy for processes unfolding around it. The external forces are said to inscribe themselves or have an impact on the body. My claim is that the political, economic, cultural, and moral of one's lifeworld is literally embodied for individuals. This is demonstrated in the tacit, pre-objective, knowledge that individuals bring to their work practices and daily interactions, where the body moves and emplaces itself in "appropriate" ways to facilitate forms of action without needing the individual to thematize or reflect upon the majority of its maneuverings. The patterning of these maneuverings through time creates sensibilities in people—habitual ways of interacting with others and objects that feel correct and natural. This brings us to the third concept, which can be summarized as "it takes one to know one." I have referred to this idea throughout the Introduction when discussing how the enskillment of the body shapes the way one comes to understand the body and its ailments. There is another aspect to this idea presented in this research, however, that brings something original to theories of embodied experience in times of illness and suffering.

Embodiment theorists in the social sciences have typically started their studies with analyses of selves or subjectivities experiencing a situatedness or centeredness in time and space. With the exception of some formative works exploring the "world destroying" power of intense chronic pain (see Scarry 1985; Good et al. 1992),²³ few ethnographically grounded theories examining embodied experience have explored the ways in which suffering individuals lose their centeredness—their experience of being situated and/or grounded in time and space. In this research, the loss of centeredness has profound effects for the suffering individual in terms of proprioceptive orientations and establishing egocentric perspectives on phenomena (cf. Gallagher and Zahavi 2008; Goodwin and Duranti 1992; Hanks 1990, 1992; Haviland 1993). The corresponding experience can be one of overwhelming disorientation, the world seeming to close-in on the individual, collapsing until one can know longer "make sense" of it. This collapse is the reverse process of bodying-forth to the extent that one losses the ability to extend sensorially into one's environment through skillful navigations. In its early stages, it is an experience of distressful constriction: cognitive, emotional, and sensory. In severe cases, the embodied capacity to attend to phenomena and act in the world with intention and anticipation is so disrupted that one's focus is consumed by a body demanding focus but resisting meaningful interpretation (Garro 1992). In this study I present three distinct cases where lobster divers loose their centeredness and must contend with extreme disorientation. These examples include: (a) novice divers learning to descend into the otherworldly depths of the sea and hunt lobster; (b) divers "hit" with decompression sickness at sea; and (c) the experience of paralysis among divers. I explore suffering as confinement and constriction, the shrinkage of possibilities, the severe compromise of the pragmatic abilities needed to properly attend-to, navigate, and

creatively explore a socio-cultural world by expanding out into it towards morally significant horizons. Sickness and insecurity can incapacitate this expansion. Vulnerability threatens to collapse a viscerally meaningful, morally imbued lifeworld, and suffering is the experience of that collapse.

1.3 - Chapters of the Dissertation

In Chapter Two, entitled Lobster Diving and the Moral Navigations of a Violent World in *Motion*, I explore how and why Miskitu men come to take-up lobster diving by tracking pivotal events and circumstances in the lives of two seasoned divers. I demonstrate how structural violence manifested itself uniquely in their lives, leaving them with a distinct range of choices that tested and re-structured their moral alignments, and placed them in distinct social contexts of vulnerability. Because this dissertation aims to reveal how dive-related illnesses come into being, and because the illnesses addressed here are connected to a specific form of labor, Chapter Two examines the connections between historical events, regional changes, the emergence of the seafood industry, and how Miskitu men come to dive for lobster. In the way the chapter examines the ethnographic context of lobster diving and history of the Caribbean Coast through past research, the chapter also serves as a form of literature review. Chapter Three has two aims: (1) explaining the unique ethnographic and video-graphic methods utilized to study enskillment processes in this research; and (2) providing a summary of oceanic physics to illustrate the otherworldly conditions encountered by lobster divers, and the physiological processes associated with decompression sickness. Although I argue in this dissertation that the senses become culturally elaborated through embodied practices, and therein contribute in shaping

perceptual processes, I make an explicit effort in Chapter Three to confront and understand the generalized physical effects that the oceanic environment has on the body. <u>Chapter Four</u> analyzes the embodied actions of lobster divers as they work undersea and tracks how specific forms of movement and emplacements of the body contribute to enskillment processes. I focus on two important practices in this chapter—the headfirst descent and buoyancy control breathing—that afford a particular kind of attunement of the senses to help divers gain stability and control underwater, so they can effectively navigate the oceanic environment. After demonstrating how divers gain control of their bodies in the undersea world, I then present how an array of indexical signs reveal themselves to divers through embodied action. These signs assist divers in determining environmental conditions and locations of productive lobster habitats. Chapter Five explores how the enskillment processes outlined in Chapter Four shapes the ways in which these lobster divers sense, perceive, and work through their dive related ailments. I argue that CI lobster divers experience themselves as capable in part because they can usually manage their illnesses effectively. I follow diver navigations of the broader Corn Island community and how the experiences of pain become meaningful as they work on constructing their futures and forms of moral personhood. In the latter half of this chapter I explore social experiences associated with this context of structural violence that disrupt their ability to attend-to and control their ailments. <u>Chapter Six</u> details the emotional impacts of near-death experiences at sea, and follows the adversities encountered by lobster divers who become crippled after dive accidents. I demonstrate how a world that was once opening-up for them when diving, is experienced as closing in upon them when they become disabled. This experience of world a collapsing inward makes for a very distinctive form of suffering. In a twist of cruel irony, this form of suffering is

sometimes relieved by	getting back into th	e water and re-	attuning the di	sabled body for	lobster
diving.					

NOTES CHAPTER ONE

- ¹ Foreign consumers not knowing where their lobster come from is, of course, not the only problem. International industry is directly implicated in the infrastructure of the Nicaraguan seafood industry in several ways.
- ² Ending lobster diving was a very controversial topic while I was conducting my research. The federal government tried to end lobster diving several times, only to give-in to Miskitu protests demanding that they be compensated for losing this industry—the primary source of income for many Miskitu families.
- ³ See Leslie Butt's 2002 paper regarding the "Suffering Stranger" and the absent "voices of suffering" in many scholarly works focusing on the global poor.
- ⁴ See also Mascia-Lees (2011) for a brief outline of anthropological research trajectories focusing on "the body" versus research on "embodiment."
- ⁵ Courses of action and movements of the body "feel right" largely because they coordinate with others in a cultural environment. One's comportment is developed through a lifetime of social interactions where an attentional attunement to valued ways of using and orienting towards the body index notions of moral personhood (see Geurts 2002).
- ⁶ Anthropological studies of "the body," "illness experience," and "social suffering," successfully integrate analyses of larger scale processes into their research on the ways in which local social/moral worlds shape subjectivities in contexts of violence, illness, and trauma (see Biehl et. al 2007; Das et. al. 2000, 2001; DelVecchio Good et.al. 2008; Fassin 2007; Holmes 2013; Scheper-Hughes and Wacquant 2002). My claim is that studies with an explicit focus on "embodiment," and the concept's phenomenological underpinnings, do not usually look as closely at political-economy or structural violence.
- ⁷ I would agree also with Bourdieu (1977), who points out that various forms of capital—social, symbolic, material, etc.— are distributed differentially within these patterns or "structure."
- ⁸ With the term "household," I mean the various manifestations among the Miskitu families I worked with on Corn Island. In general this usually meant orienting financially towards a "nuclear family" in one house, or taking-up various forms of responsibility towards a larger group of extended family on the Island residing in different houses (sometimes next to each other, creating a kind of family compound).
- ⁹ Importantly, this statement demonstrates how most Corn Island lobster divers have rejected the small-scale subsistence practices still valued in many mainland villages and have dedicated themselves to cashearning labor (see Dennis 2004; Dodds 1998; Helms 1971; Nietschmann 1972, 1973, 1974).
- ¹⁰ The lobster divers I interacted with did not discuss the notion of "structural violence" explicitly, but they did often refer to the corrupt systems that continuously worked against their efforts and oppressed segments of the population.
- ¹¹ Such references to the "Pacific Side" demonstrate the subtle ways in which these divers often index racial divides and tensions between the Miskitu people and the Mestizo population, whom they, along with most Creoles, generally refer to as the "Spanish" from the West Coast of the country. These references show that racial issues—though rarely explicitly referred to as such—have become relevant in relation to Miskitu perceptions of social welfare and contribute significantly to Miskitu experiences of diving and the Caribbean seafood industry more generally.

- ¹² I concede that this very brief definition of symbolic violence is partial at best; it does not comment explicitly on the ways in which the behaviors and actions of people differentially positioned—whom embody different forms and amounts capital—tacitly sustain and nurture structures of inequality. See also Farmer's notion of "geographies of blame" (1992).
- ¹³ Bourdieu's (1977) notion of symbolic violence was—from the beginning—presented in terms of structural processes. Structure in "structural violence" is conceived of somewhat differently, but is useful for the analysis in this dissertation. The two paradigms are thus set-up as complementing each other here (see Holmes 2013 for a second example)
- ¹⁴ These cited authors also comment on the importance of identifying different forms of violence.
- ¹⁵ Quesada et al. (2011) and Holmes (2011, 2013) advance what they call "structural vulnerability," while Leatherman (2005) promotes a political-ecological approach. All of these works inform my treatment of vulnerability, but my focus on the role of moral orientations relative to courses of actions in times of distress expands these theories. I therefore prefer to just state it simply as "vulnerability." Just as there many different forms of violence (not just structural), there are also multiple forms of vulnerability.
- ¹⁶ Jackson's (2004) book *In Sierra Leone* is an eloquent exploration of the (inter)subjective and historical consequences of war and wide-spread violence. He writes: "Up to a certain point, people cling to the hope that things will change. That the resources, opportunities, and futures they feel that they are owed will magically or miraculously be made over to them. In lotteries and games of chance, in fantasies of possessing divine or occult power, people resist what Pierre Bourdieu calls 'a fatalistic submission to the forces of the world' (2000:223)." But when nothing happens, young men turn to death defying games in a desperate attempt to generate a sense that they exist, that they can act, and that they are more than mere playthings of fate. And it is at this moment that the fantasy is born of reversing the situation that has condemned you to nothingness" (145). I think Jackson's insights on this topic can, in some ways, be applied to the circumstances Miskitu lobster divers are confronting; my argument is not that they take-on diving to prove they can act meaningfully in the world, or prove their existence, but that they can generate a sense of purpose, control, and look towards a future by taking on this very dangerous work. I would also argue that their ideas regarding "reversing the situation" are much more than fantasy.
- ¹⁷ Global Health departments are growing rapidly in governmental agencies and universities around the world. The presumed advancement of the global health approach is a renewed interest and emphasis in researching the intersections of transnational processes and localized conditions of social suffering to better understand disease proliferation, and prevalence, so that we might intervene and treat populations more effectively. An important aim of such studies is to gain an understanding of what directs and influences the courses of action people take in times of illness, suffering, and distress. This dissertation will propose that we look closely at the ways in which people attempt to instill capabilities—and capable sensibilities—so they may confront an array vulnerabilities that can be understood in relation to a local moral orientations and forms of social organization, as well as the specific embodied ways people come to know and experience themselves and their worlds.
- ¹⁸ The control asserted by Corn Island "skiff divers," is much different than the experiences of "ship divers" working out of Bilwi. I will explain the details of these difference in later chapters. Many divers move to Corn Island to escape working on the ships and become skiff divers.
- ¹⁹ In this dissertation I avoid discussing relationships between "structure and agency" because I think it is false dichotomy in the functioning world. The focus here is on a world in motion, where the "structures" themselves are necessarily subject to change. It is my opinion, the "structures" evoked by social theorists are not nearly as durable or stable as they make them out to be, and if we cannot regard the structures as inherently stable, then agency can simply be understood social interactions and individual navigations that continually shape and reshape patterns of social organization that theorists might refer to as "structure."

²⁰ I recognize that the notion of enskillment is not widely used by psycho-cultural anthropologists and that my analytical descriptions of "the body" and "embodied processes/practices" borrow from a long list of embodiment paradigms, the most recognizable being Merleau-Ponty's (1962) "body schema" and "body image," Aristotle's "hexis," Mauss's (1968) "techniques of the body," Bourdieu's (1977, 1990) "habitus," Bateson's "deutero-learning," Gidden's "practical knowledge," and Csordas's recent account of "somatic modes of attention" (there are, of course, many others). While I find all of these paradigms incredibly insightful and useful theoretically, most of them lack a clear "outline" pertaining to ethnographic methodology, so we are not given a concrete "everyday" demonstration of how the concept comes into being, changes, and directs courses of action. "Habitus," for example, has been used in so many ways by scholars and has been identified through so many disparate methodologies, that it is difficult to say if different authors are really demonstrating the same phenomenon that Bourdieu originally directed us to explore. Because these theories are so vague on methodology, we are also left wondering where we should locate the role culture, structure, agency, power, and IN ACTUAL everyday forms of social interaction (see Ortner 2006). Rather than going to the lengths of describing how each of these contributes to my version of enskillment and then pointing out what I understand to be the short comings of the concept for my usage, I have chosen enskillment—not only because I agree with much of Ingold's (2000) interactive-sentient ecology argument, but also because his concept is used far less among scholars, making it convenient to add my own insights to his. That said, Csordas's "cultural phenomenology" and notion of "somatic modes of attention," obviously lend a great deal to this research; however, my focus on the subtle details—and everyday-ness—of movement and semiotically mediated interaction, offer a different methodology and, in my opinion, a different way of demonstrating "indeterminacy," "the preobjective," and constitutions of the moral self.

²¹ There is irony in this sentence when we consider that phenomenologists often comment that "phenomenology" is really more of a methodology than a coherent trajectory of social theory.

²² A growing number of philosophers, social theorists, and neuro-phenomenologists have recently endorsed their own versions of what has become widely recognized as "enactive theory." Studies focused on the *enactment of perception* have helped in conceptualizing more clearly the primacy of bodily movement, action, and intersubjectivity for studies of perception (cf. Noe 2012; Myin and O'Regan 2002; Verela 1999; Petitot et al. 1999). The arguments and findings of these scholars demonstrate important variations, but in general, the enactive approach has challenged renderings of perception as primarily physiological and representational without ignoring the contributions of contemporary research in neurology (as socio-cultural anthropology has generally ignored it). While a survey of these studies is not suitable here, their relevance to this research is in the way they consider how the materiality of our embodiment forces us to perpetually contend and cope with the penetrating environments that we encounter through habituated movements and sensorimotor skills. While these basic claims clearly inform many of the aims of this dissertation, enactment approaches typically do not clearly demonstrate how actors actually instill their sensorimotor skills differentially through their navigations of their environments.

Structured environments—or "lived worlds" as phenomenologists may prefer to call them—are not neutral, but are instead always of a material, social, and cultural character that elicits particular forms of interaction with them. As Gallagher and Zahavi (2008) put it, "...my experience is shaped by the insistence of the world as much as it is by my embodied and enactive interests" (100). Gibson's (1986) theory of "affordances," for example, highlights the role of movement while demonstrating how objects in our environment, combined with the physical qualities of the body, *afford* different types of action. The very shape of our world and the kinesthetic capacities of our bodies open up *possibilities* for action and situations of embodied meaning. Theories of perception that take our environment as "insisting" particular kinds of engagement and action, and thereby facilitate a growth of particular sensorimotor skills to satisfy embodied interests, clearly challenge theories that take perception as a passive intake of sensory information.

²³ See also ethnographic studies exploring relationships between the senses, madness and/or mental derangement (Desjarlais 1997; Howes 2005:357).

CHAPTER 2

LOBSTER DIVING AND THE MORAL NAVIGATIONS OF A VIOLENT WORLD IN MOTION

Work at sea is about movement—the movements of the sun and the swell, currents and storms, boats and people, and, of course, those migrating forms of sea life, such as lobster. The ability to skillfully anticipate and predict the movements of yourself in relation to these oceanic phenomena is what usually determines successes and failures at sea. The environment offers instability, and one's adeptness in identifying fluctuations and transitions can promote safety and effectiveness in activities. So it is at sea, and so it is all along Nicaragua's Autonomous Caribbean Coast, where socio-political instability and rapid economic change over the last four decades has benefited those with the skills and resources needed to anticipate and move relative to unfolding processes. As preparation for the impending exploration of the unique undersea interactions that underwrite processes of enskillment, this chapter widens the analytical lens and offers personal histories of movement across broader vistas of time and space. The approach here is both historical and person-centered, with an aim at demonstrating the ways in which regional changes through time have influenced the varied trajectories of diver's lives. My argument is that Miskitu divers come to articulate experiences of morality and personhood through specific forms of mobility and enskilled movements. The chapter explores what circumstances, events, moral dilemmas, and projections of the future have brought men to work under the sea as lobster divers. In the way this chapter explicitly engages existing literature to explicate both historical change and current conditions along Nicaragua's Caribbean Coast, and among Miskitu communities, the chapter offers a brief exploration of some relevant research conducted in the

region over the last several decades; however, this presentation of past research is somewhat unconventional in the way it is integrated into narratives that assemble important events and experiences in two men's lives prior to them becoming lobster divers. These explorations of personal and regional histories should not be considered as far afield from impeding analyses of embodied action and illness experience presented in later chapters. The intent of this Chapter is not to serve-up some broader examples of "context" and history to provide a cultural backdrop for actions—so we might later situate those actions, interpret their local meanings, and then evaluate their effects in the ethnographic present. As described in the Introduction, the goal here is to track how sensory modalities, experiences of illness, patterned sensibilities, and larger sentient ecologies come into being for ailing Miskitu lobster divers through embodied interaction and movements. This chapter directly supports this ambition in the way it connects embodied action, and dive-related illnesses to the industrial structure and the unique materiality of the current seafood industry on Caribbean Coast.

As outlined in the Introduction, the Caribbean Coast seafood industry, operating through multiple forms of organization across diverse geographies, directly affects the sociality and materiality of the cultural and physical environments in which lobster divers work. Thus, the historical structuration of the industry—as an international assemblage of capital, labor, technologies, etc.—has a profound influence in shaping dive practices, and by extension, the embodied perceptual processes under scrutiny in this dissertation. Although this industrial apparatus is not considered here to be a top-down form of power that unilaterally determines the behaviors and sufferings of those working within it, the industry's links to broader regional, national, and transnational processes has a profound influence in (re)shaping the lived spaces

experienced by Miskitu lobster divers. Consequently, my argument is that we must attend to both the emergence of the industry itself—as a structured and recursive, yet indeterminate and evolving experienced phenomenon—and fine-grained analyses of embodied action, if we intend to track how these dive-related illnesses come into being. My focus on the nuanced movements of bodies working undersea and the interactive constitution of sensoriums and perceptions within this unique environment, is presumed to contribute something original and significant to current social theories of cognition, sensory experience, and embodiment; however, the research is ultimately a vehicle for tracking the ways in which dive-related illnesses come into being and contribute to particular articulations of social suffering in this context. Because the illnesses examined here manifest through work-related practices—they are what epidemiologists refer to as "occupational diseases"—we must explore the personal impacts of historical events and local conditions to better understand what brings Miskitu men to work under the sea. Narratives describing the material, symbolic, social, and embodied resources harnessed by these men to navigate personal and regional changes through time, in connection with explanations of what brought them to the industry, will provide critical insights as we approach the fundamental questions of why these men continue with lobster diving and how they are able to endure it over the course of several years. I will argue in later chapters that much of the why question can be answered by analyzing the how; that is, by analyzing how coordinated dive practices structure perceptions of self, body, and environment, we can begin to track how these divers constitute themselves as *capable*, orient their actions towards imagined futures, and continue with the work even in the mist of suffering. But the particular sensibilities tied to the "capable self," grown largely through interactions at sea, must also be harnessed to engage with a broader environment

of structural violence, where persistent uncertainty and unfolding situations of vulnerability are the norm. These experiences of vulnerability, as they are confronted by the potential diver and the capable seasoned diver, contribute to this question of "why dive," and therefore must be examined in this chapter.

Gaining access to oceanic commodities at a profitable scale means finding an entry point into the Caribbean Coast's seafood industry. This can be facilitated through large "industriallevel" ships, where an array mechanical devices are systematically employed to harvest a seafood resource, or through "artisanal-level" boats with much smaller crews, where manual efforts are harnessed to catch and haul-in sought-after resources. Lobster trapping and lobster diving are practiced at both the industrial and artisanal levels as commercial enterprises. In general, industrial scale operations take place on steel-hauled ships more than thirty-five feet in length, while "artisanal" practices usually take place on "pangas"—fiberglass skiffs measuring fifteen to twenty-five feet length and equipped with outboard motors. Small canoes and wooden sailboats of various designs and sizes are also utilized along the Coast for artisanal and subsistence forms of fishing. The brief narratives offered below, assembling events in the lives of Alonso and Hugo, look back in time to explore how two seasoned Corn Island lobster divers came to first take-up lobstering, while evaluating the impacts of their movements between industrial and artisanal fishing practices. The narratives attempt to retrace the ways in which dramatic regional changes affected the participation of these budding lobster divers in different forms of the lobster industry, while simultaneously evaluating how regional changes also affected the evolution of the industry itself. Again, the analysis here is primarily drawn from diver narratives, rather than close examinations of embodied action, but the ultimate goal is to

gain some insights regarding the forces and process these men encountered as they came to commit themselves to working under such extraordinary conditions under the sea. How have different configurations of the industry—by way of structuring different embodied practices and engagements—shaped the various ways in which lobster divers have come to know and experience their movements through time as "moral becomings" (see Mattingly 2014)?

2.1 - Alonso

Alonso was one of the first lobster divers on Corn Island to take me out to sea with his crew. To my surprise, on the first day I accompanied him, his actions managed to challenge just about everything I had read about Miskitu Lobster divers prior to arriving in Nicaragua. He quickly proved, for example, that he was a precise navigator of the waters surrounding Corn Island, and very knowledgable about the local oceanic ecology. He always demonstrated an effective preparedness not only in the way he meticulously maintained his gear and managed his expenses, but also in the way he kept detailed records regarding his dive activities (in "divelogs'). He was already an accomplished and highly regarded seafarer in his early twenties and his crew openly demonstrated a respect for his qualities of leadership at sea and at home. Contrary to popular depictions of Miskitu lobster divers, he understood that deepwater diving for extended periods of time meant contending with radical changes in atmospheric pressure, resulting in dangerous accumulations of nitrogen in the body. Perhaps most importantly, he knew that he did not have all the sophisticated equipment made available to professionally trained divers in more affluent countries, and would therefore need to assess and manage dive-related illnesses very carefully through the knowledge and methods that he himself had developed through his

experiences as a diver (this will be illustrated in Chapters Four and Five). From Alonso's perspective, lobster diving was not simply a last resort undertaken solely for the sake of survival, it was an unjust and dangerous, yet somewhat necessary, step towards a better future for him and his family. Lobster diving for him was a kind of perverse opportunity. He was consistently successful in finding the lobster and reinvested much his earnings back into his small lobster diving operation so he could build capital, increase future earnings, and gradually become more independent of others who controlled valuable resources in the community. He was, by nearly every other lobster diver's evaluation on Corn Island, an example of someone successfully navigating this brutal industry.

The central aim of the section is to explore how Alonso came to undertake lobster diving and simultaneously confront it's associated illnesses. The narrative here demonstrates the significance of historical events, living conditions, and social processes unfolding in Alonso's life, and on the Caribbean Coast more generally, in facilitating his movement towards lobster diving. It is important to point out that the structure of the narrative presented below is constructed by myself and not by Alonso.² Alonso chose not to participate in recorded interviews for this research project, and never offered a detailed coherent narrative describing why he began lobster diving. He was, however, usually very receptive and responsive to my relentless questions. Over the course of several months, I pieced together the many different reason's provided by him to explain why he came to live on Corn Island and to take-up and continue with lobster diving.

2.1.1 - A Village by the Sea

Like so many of the Miskitu people living on Corn Island, Alonso was not born and raised there, but migrated to the Island in search of economic opportunity. His "place," as he likes to refer to it, is a fairly small village of roughly three thousand people located on the Southern Caribbean Coast. The people of his place overwhelmingly identify as Miskitu and prefer to speak the Miskitu language; and because it is a coastal village, there is a long history of exploiting oceanic resources commercially and as a vital component of small-scale subsistence practices. Small-scale subsistence practices included family-based agricultural activities, complemented with excursions into the forest, and sea, to hunt, fish, and collect valued forms of food (see Dodds 1999, 2001). Men would sometimes leave the village for months at a time to earn cash performing "company work," but would typically return to spend most of the year at home (see Helms 1971; Garcia 1996; Nietschmann 1973; Dennis 2004). Most of village has now turned to commercial lobstering, but agricultural activities still hold some importance, and forging supports people when lobstering is slow.

Following the basic organization of so many other Miskitu villages along the Coast, the baseball diamond and the Moravian Church serve as the center pieces of the the village, and a network of concrete and dirt paths connect groupings of stilted wooden houses, most of them lacking indoor plumbing and consisting of two or three rooms total. Extended family and/or affines usually situate their homes near each other on land claims. Small villages to the North and South are roughy a half day's walk away form Alonso's village, and to the east flows a large river that leads villagers to the most fertile lands for agricultural practices. Alonso's mother was born and reared in this village and many of her immediate and extended family still live there.

She married a fisherman who had arrived in her village from Jamaica when she was still in her teens. They had seven children together, Alonso being the sixth born in his immediate family. The arrival of Alonso's father from Jamaica to the shores of the Mosquito Coast was not considered unusual. For centuries the Mosquito Coast has received African descendants arriving by slave ship, merchant ship, mutinied ships, or fishing boats (see Bell 1899; Mueller 1932; Conzemius 1932; Roberts 1965 [1827]). The ancestors of Miskitu people were most likely not even referred to as "Miskito," until after the indigenous people on the Mosquito Shore had mixed with English and Africans for several decades. Contemporary Miskitu people often marvel and joke about the phenotypic diversity among their children.³ By the time Alonso was nine years old, his biological father had grown deeply discontent in Nicaragua, mostly because of the continuing wars and violence in the late 1970s and early 1980s and the rapid decline of the commercial fishing industry on the Caribbean Coast. Eventually, he decided to leave his family and move to Honduras in search of improved economic opportunities. Ignoring the furious protests of his wife, he somehow found a way to take Alonso with him as he left the village. A few days later Alonso found himself crossing the northeast border of Nicaragua into Honduras with his father. The day he crossed the border, Alonso decided that he would stealthily abandon his father and make his way back to his village by himself. One evening while sitting on the veranda of his mother's home he explained to me what had transpired with his father's departure.

Corn Island is a good place. This place is different [his home village]. My mother, my family is here. My father tried to take me from here when I was little. He took me to Honduras to live there. I came back. He wanted to go there, [that is] okay. Maybe he needed to go there, [that is] okay. It was not my time to go there. I came back by myself. I

was little. My eye's were big, I saw plenty of things on my way back. So then I stayed here to help my mother and one big hurricane came named Joan. All of this was gone away [pointing to houses around us with both hands]. Afterwards there was nothing, no animals, houses, nothing. Afterwards everybody started fishin fish to get food. Then the lobster started and now it is just the lobster.⁴

Alonzo describes a pivotal moment in the Caribbean Coast's history, when the ravages of war and a particularly destructive hurricane facilitated a shift in economic patterns. Many populations along the coast switched to fishing and lobstering for cash after most of the last large commercial plantations were destroyed; and when Violetta Chamorro and a new neoliberal government was voted into office in 1990, the economic transition to commercial lobstering greatly accelerated. Chamorro administration policies reconnected the Caribbean Coast's seafood industry to the global market. Alonso's mother remarried sometime after Hurricane Joan. It seems Alonso and his siblings were fond of their new step-father, who was bringing home a somewhat steady stream of cash earned from the growing industry of lobster diving. Nearly a decade of civil war followed by Hurricane Joan (1988) had decimated the Caribbean Coast fishing fleet and seafood industry, and by the late 1980s Honduran seafood corporations and investors from the "Pacific Side" of Nicaragua were aggressively rebuilding the industry to take advantage of an emerging North American market for lobster. Employing lobster divers to work from large corporate owned ships proved to be a quick and low-cost route to the lobster. Ship captains would motor their divers out to known locations and the divers would then launch canoes from the ship and paddle out to find their own areas to dive. The full range scuba gear needed to accomplish this work was never offered by the operators of these ships. Those lobster

divers of the early 1990s knew little about deepwater diving and the dangers in entailed. Each diver was paid a previously agreed upon amount of cash for every pound of lobster they delivered. In those early years of the industry, the lobster were generally plentiful, large, and found at lesser depths.

Alonso's step-father did not attempt to recruit his step-sons into diving and instead encouraged them to invest in their own small-scale operations of trapping lobster from pangas. He had other plans for Alonso, whom he felt had the skills to excel academically. Alonso's step-father would pay for him to move to the city of Bluefields, a "Creole place," and attend a quality secondary school that would prepare him for a university education.⁵

2.1.2 - From Student to Skiff Diver

The educational and larger social environment of Bluefields facilitated Alonso's improved fluency in Spanish and Kriol English. He knew his educational experience in Bluefields would be of value to him, but as he approached graduation from secondary school, he was already apprehensive about undertaking a university education. In Bluefields he had become aquatinted with many university students, and found that the vast majority of them had been unable to find well paying jobs after graduation. Many of the university graduates ended up working on lobster boats or interviewed their way onto international "cruise ships," where they washed the clothes and dishes of prosperous North Americans and Europeans on holiday. But even while the economic opportunities were not plentiful for his Creole friends in Bluefields, when compared to most of his Miskitu friends and family, they generally did have a broader range of opportunities. This was usually because their parents more often controlled at least *some*

assets—a boat, a concrete house, land, a small business, etc—that could assist them in earning cash or sustaining a small business. It was during this time of indecision regarding a university education that Alonso accompanied his step-father to Corn Island to help him prepare for an upcoming dive trip. Eager to make his own money, he was able to convince an ambivalent stepfather to negotiate a position for him on a dive ship that would soon be leaving port. 6 To the surprise of his step-father, Alonso ended his first thirteen day trip on the ship as the second best earner. On the following two trips, he became the ship's top earner, beating out his step-father on each trip. Despite Alonso's successes, his step-father was still attempting to steer him towards a university education; but Alonso took to Corn Island immediately. It had the modern conveniences of Bluefields, but was a smaller, more beautiful, and safer community. The Island was modernizing far more quickly than his home village. There were daily flights to and from the Island, two large seafood processing plants, and a growing number of stores with a wide array of interesting products for purchase. Historically, the Island has been inhabited predominantly by Creole people, a population that identifies with African ancestors who had either accompanied pirates and privateers to the Coast or had somehow escaped or endured the enslavement practices of European colonists in the sixteenth century (Bell 1899; Gordon 1998; Naylor 1967). The Creole population of Corn Island and Bluefields have found ways to position themselves advantageously among the other groups in the region, and have generally prospered to a greater extent within the various economies that have risen and stalled along the Coast (see Gordon 1998; Hale 1987; Minks 2013). Alonso noticed that a relatively high percentage of Islanders owned pangas and therefore worked for themselves. What persuaded Alonso to stay on Corn Island and continue diving was not simply his successes on the large lobster diving ship, it

was a moral orientation towards modernity, independence, and what seemed a better life and future, in addition to his growing understanding of the acopio system that was taking shape on the Island.

Acopios are small businesses that specialize in selling and leasing fishing/lobstering supplies to smaller (artisanal) operators. The large seafood processing companies usually provide supplies for the large industrial lobstering vessels, but the large companies find it difficult to serve all of the smaller operators lobstering from pangas. Acopio owners paid their lobsterers the same price per pound as the seafood companies, but the acopios make approximately .50 dollars per pound as they pass the lobster on to the larger seafood companies for processing and export. So while the smaller acopios were owned and operated by local individuals and partnerships, their existence depended largely on the larger companies, who agreed to pay the extra .50 per pound to keep a steady stream of lobster coming in from the hundreds of smaller panga operators. In a very short time on Corn Island, Alonso had become confident in his ability to find the lobster as a diver, and in the acopio system he saw a path for himself to eventually purchase his own panga and run his own lobstering crew. Alonso once disclosed that he would not have continued with lobster diving if it meant continuing work on the large corporate-owned dive ships.

Those captains [on the large dive ships] can take you to any place they want you to dive. Maybe you have a captain, maybe he is a hard man. Maybe he takes you some place where you dive 120, 130, 140, 150 feet. He does not care about the divers, only about the product, the money. Those captains are not from this side [the Caribbean Coast], maybe they are from Managua, or maybe Honduras. If a diver gets sick, there is nowhere to go.

Here I dive where I want to dive, dive when I want to dive. But those divers here, the panga divers, skiff divers, they, they are soft divers. They wake up in their beds, not on the big boat, and they stay in bed. Then they are not ready. The lobster start running and they are not ready. You need to go find the lobster everyday, then you come home, not like the big boat. ⁸

Alonso despised lobster diving from the ships because the ship captains determined where, when, and how he would dive. Panga diving from Corn Island would give him much more control and allow him to come home to his family everyday after diving. For Alonso, perhaps the only thing worse than being confined on the large dive ships for weeks at a time was the thought of taking-up traditional subsistence practices to provide for himself and his future family. He often voiced a total rejection of farming, and questioned how anyone could be content earning so little money. He was only interested in earning cash, and equated farming, foraging, and small-scale fishing practices to a life of extreme poverty.

In his early days of diving from Corn Island pangas, Alonso earned the trust and respect of a local acopio owner. Eventually he was able to arrange a lease-to-own arrangement with the accopio owner, and within a couple of years of arriving on Corn Island, he owned a panga and a motor outright and was able to hire a reliable "bubble-man" and "motor-man" to assist him. Although most of the non-Miskitu Islanders did not approve of lobster diving, Alonso was becoming recognized in the larger community as a talented and reliable lobsterer who could be trusted. His appearance and demeanor often impressed people. He dressed well, avoided illicit drugs, and usually drank alcohol moderately. He also had a sharp wit and could use his humor to display confidence, direct people's attention, or defuse tense situations. In addition to his work

ethic and lobster diving skills, his fluency in Kriol English assisted him in establishing social capital in the community. In his home village, he spoke Miskitu and was unquestionably identified as Miskitu by others, but on Corn Island Creole people often said his physical features and Kriol language skills resembled those of a "black man" (a Creole). Alonso was well aware that in the mist of social interaction, these embodied Creole traits could be foregrounded to divert attention away from his status as an outsider (see Jamieson 2003; Nietschmann 1979; Minks 2013). Since the Creole people still owned most of the land, businesses, and boats on Corn Island, this fragile ability to be treated as an insider at times could benefit him.

Not long after taking up panga diving on Corn Island, Alonso met a Miskitu women named Clara whom he married after a rather brief courtship. She was from the North Caribbean Coast and had come to Corn Island with her two brothers, both of them lobster divers. By the time Alonso and Clara had their fourth child (they would eventually have six have children), the couple owned two pangas with motors and were employing four family members. Taking the crew of six into account, the money earned between the two dive pangas became the primary source of monetary support for roughly three dozen people. The couple rented a very modest house with two bedrooms and were careful not to invest too much money into a home sitting on land they would most likely never own. Family members who had come to the Island to work for them rented houses next to theirs, creating a kind of larger family compound where food, money, laundry duties, and child care was continually shared. Much like Alonso, Clara exhibited strength, organization skills, and obvious leadership qualities. Friends and family members often looked to her for answers and she managed most of the household money while attending to the day-to-day responsibilities of the surrounding compound of extended family. Although Alonso

focused more on the well-being of his nuclear family while on Corn Island, and those family members who worked for him, he did send remittances back to his mother.

Clara was well aware of the dangers involved with lobster diving, and she sometimes worried terribly about Alonso's health and the cumulative effects of lobster diving was having on his health as he grew older. Ultimately, however, she trusted his insistence that he knew how to protect himself from serious injury, and because he had gone a decade without an accident by the time the research for this dissertation began, she had reason to believe him. When Clara voiced her concerns, Alonso assured her that he would transition to lobster trapping in the near future or would convert their assets into cash so they could invest in a new business.

2.1.3 - Hit by the Pressure

Alonso found a consistent and productive lobster diver in his brother-in-law Micheal, whom he hired to work from the second of the operating pangas. But while Micheal proved that he could find the lobster nearly as well as his brother-in-law, he differed from Alonso in the way he conducted himself when he was not working. Despite persistent warnings from Alonso, Micheal smoked marijuana habitually, sometimes smoked crack cocaine, and often spent several consecutive days drinking beer and rum with his friends. Even though it frustrated Alonso to keep Michael from diving and bringing-in money for the small operation that so many family members were now depending on, when Micheal was understood to be intoxicated, Alonso protectively kept him from diving. Intoxication or hangover is the most recurrent explanation given by lobster divers experiencing a dive "accident." Only six months after I had met Micheal, he went lobster diving after several days of intoxication and lost his life. Alonso and rest of the

family were incredibly upset over the incident, but they would need to strategize how to get the second panga operating again as they grieved. Alonso hired a new diver, but he turned out to be unreliable and unproductive. Meanwhile, Alonso was pushing himself beyond his limits and breaking his own safety rules of diving to keep enough money flowing into the many households that were dependent on the successes of the two panga operations. Roughly five months after Micheal died, Alonso was "hit by the pressure" while diving and was seriously injured. Alonso's preparedness is probably what saved his life. He always carried extra fuel and money with him when he went out to sea, and these two resources allowed him motor directly to Bilwi after the accident to receive treatment at the Coast's only hyperbaric chamber. According to Alonso, he experienced an excruciating pain in his back as he traveled by panga to the chamber and was certain that he was going to die. He felt lucky and blessed to make a near full recovery from the accident and was more convinced than ever that it was time to give up lobster diving. Shortly after his accident he sold the second panga and motor, and began investing in the equipment needed to begin trapping lobster.

As Alonso assembled the needed gear and equipment to begin trapping lobster instead of diving for them, he started to entertain the idea of creating a cooperative that could function as an acopio for it's members. The cooperative-acopio structure would give its members an opportunity to invest more easily in the materials needed for their own operations and provide a larger monetary return for their product. He began by approaching Miskitu lobsterers on Corn Island and attempted to organize them into a federally recognized cooperative so they would be eligible to receive a small loan from the government to get them started. Alonso's repeated attempts to organize Miskitu lobsterers on Corn Island failed. He attributed these initial failures

to the conflicting ideas and values held by the Miskitu people on Corn Island. Most of the Miskitu people on the Island had migrated from the many different villages dotting the Caribbean Coast, and families did not have histories of interaction and cooperation that build mutual trust. Knowing this, Alonso decided to approach the people of his home village with his idea. The remittences that he had continued to send back to his mother had earned him respect in the community, and within a year Alonso and his new partners were able to receive recognition and funding for their cooperative. They decided to lease a small cay off of the coast to use as their base of operations. Alonso's education and language skills proved to be an invaluable resource as the cooperative submitted the steady stream of confounding paperwork to the government officials in Spanish. Capitalizing on his reputation, Alonso was also able to connect the cooperative to the large seafood companies on Corn Island. They received substantial discounts on supplies and materials with the agreement that they would sell their lobster to these companies. With the success of the cooperative, Alonso was able to purchase two additional pangas and increase his income considerably. As of writing of this dissertation, the cooperative is operating successfully and Alonso and his family are splitting their time between his home village, the cooperative cay, and Corn Island.

2.2 - Hugo

When I met Hugo for the first time, he was at a very difficult time in his life. Four months earlier he had suffered an exceptionally damaging dive accident that was affecting the functioning of internal organs and left much of his left leg paralyzed. In the hours following the accident, he was not able to make it to the hyperbaric chamber, and by the time he did make to

the chamber, three days later, most of the damage done to his body was irreversible. To make things worse, he had contracted malaria in the weeks following his accident and was enduring intense fevers on a daily basis. The pain resulting from the two illnesses made it very difficult to rest peacefully and he was lucky if he was able to get two or three hours of sleep per night. Local doctors had prescribed medications to help relieve some of the pain, but he was out of money and was unable to buy much of the medicine he needed. I asked how he was managing to pay his bills and he confided that he had been selling his belongings. He also confessed that he would soon have nothing left to sell. The space he filled in his local environment was literally shrinking. He pointed to a large plot of dirt in front of his house, "that is where my house was, but I had to sell it." I was confused, "There was a house right there?," I asked. "Yes, a large house made of board that I built for my mother-in-law. I sold it. They came and took it apart and moved it somewhere else." I then pointed to the house he currently lived in, "Did you also have this house," I asked. "Yes," he said, "but all of the house was mine before the accident." I glanced inside the house from where we were sitting on the porch and noticed that a wall had been built separating one room from the rest of the home. Hugo, his wife, and their six children were living in one room. The rest of house had been sold to the people now living on the other side of the wall. His living space was shrinking, and he was finding it very difficult to leave his neighborhood because his inability walk effectively. He spent most days sitting on his porch thinking how he might escape his predicament and take better care of his family. I followed Hugo's attempts to reestablish his livelihood on Corn Island and found myself continually questioning how his fate had turned out so differently than Alonso's. The narrative below

attempts track Hugo's navigations of the lobster diving industry and deconstruct how he ended up in his dire predicament after being injured.

2.2.1 - A Village by the River

Hugo was born and raised in small village on the Rio Coco, roughly thirty miles west from where the river empties into the Caribbean Sea. The Rio Coco flows from the west along Nicaragua's north border, separating the country from Honduras, and is considered by many Miskitu people as the primordial site of their indigenous ancestors. When Hugo was a child, most of the people in his village preferred an economy of small-scale subsistence practices, growing cassava, plantains, and rice, raising chickens and cows, hunting deer in the nearby forests, and catching fish from the river. Some men would travel down to the sea and bring oceanic resources back to village, such as green sea turtle, the undisputed favorite meal of those people living on or near the Coast. When families were able to produce extra food, especially rice, they could use it to barter for personal and household goods at one of the two village stores (see Helms 1971; Dennis 2004). Like Alonso's village, the centerpiece of Hugo's village was the Moravian Church and the baseball diamond, the sites of most activity on the weekends. Hugo received his primary education in his home village, but was pulled into the civil war between the "Contras" (mostly Miskitu people backed by the USA) and the Sandinista government before he could attend secondary school.

Hugo was the youngest of six children, and his four older brothers had been active fighters in the war. They expected that he would take-up their struggle to expel the encroaching (largely Mestizo) Sandinistas from their indigenous lands and create a sovereign state on the

"Atlantic Coast" of Nicaragua. According to his brothers, the war was a continuation of a centuries-old Miskitu commitment to fend off colonization from the "Spanish" people of the West (see Baracco 2011a; Hale 1994; Hale and Gordon 1987). By the mid 1980s, Hugo had not quite reached his teens when his brothers began introducing him to life as a soldier. After being taught how to shoot a riffle, he was assigned a series of reconnoissance missions, spending several months at a time patrolling dense forests far away from his village. He spent two years following orders ardently and living in the forests with fellow soldiers, and then decided abruptly that he would end his time as a soldier. He had been fortunate to be involved in only one small battle during his two years and there was strong indications that the war was coming to end soon. His brothers were unhappy with his decision. They continually pressured him to reassume his status as soldier. Eventually, Hugo felt that he would need to leave his village and find his own way in the world. Hugo explained to me in an interview how inappropriate he thought it was for his brothers to direct his actions and control his choices.

My brothers were good soldiers. Everybody knew them and respected them, Steadman, Brooklyn Rivera, everybody. The war was ending and they wanted me to keep fighting like they had. Everybody had stopped fighting and they wanted me to stay a soldier. They were very hard men, but it was not for them to decide my life. I did not have a wife, I could not build a house. I had to go, go away and do something different. It was my time to leave. That is when I started diving for lobster.¹²

Hugo made the decision to leave his home for the Coast and was able to find a position as a lobster diver on an international boat that fished in several locations throughout the Caribbean.

2.2.2 - From Soldier to Skiff Diver

In those early days at sea Hugo worked as a free-diver and became very good it. This form of lobster diving entails holding one's breath in order to dive down and hunt for lobster. Decompression sickness is generally not a concern, because divers can not stay down long enough or dive deep enough to bring on the illness. Using air tanks to hunt for lobster commercially was already illegal in most countries when Hugo was free diving in the late 1980s and early 1990s. His earnings were modest as a lobster diver on the international boat, but because he lived on the boat and had zero expenses, he was able to save small amounts of money at times and purchase high quality personal items he desired. He did not send remittences home to his family. Although his brothers did not necessarily "disown" him, they treated his departure as a clean break from family affairs and did not expect his participation. After several years of working on international boats, Hugo landed on Corn Island and became intrigued with the prospect of earning more money as a lobster diver on the large Nicaraguan ships. He saw that the divers where using air tanks to stay down longer and find more lobster, and thus make more money. After a short time working on the large dive ships, however, he became disenchanted with the work in much the same way Alonso had; he had no control over his own dive practices and recognized the great danger in the situation.

Although Hugo did not want to dive from the ships anymore, he also did not want to leave Corn Island. He was impressed by the Island's beauty and the growing cash-based economy. There was nothing waiting for him in his home village and he did not even consider the possibility of returning to a place where his brothers continued to control most of his family's property and resources; and like Alonso, the prospect of hunting, farming, and foraging for a

living did not appeal to him. On Corn Island he found a place with a steadily growing population of migrant Miskitu people. The local Creole population was very concerned, and perhaps a bit distraught, about the rapid growth and demographic changes that was coming to their Island with the lobster boom of the early 1990s (see Melzoff and Schull 1999; Minks 2013). 13 From Hugo's perspective, however, this was a place where he could live among a large population of Miskitu people, while enjoying the modern convinces that were coming to the Island a faster pace than most mainland Miskitu villages. He decided to give panga diving a try and entered into the acopio system. In a relatively short time he gained a reputation as somebody who could consistently deliver product. But unlike Alonso, he found Corn Island to be a somewhat difficult place to navigate socially. He was barely literate and did not speak Kriol English or Spanish very well, making it difficult for him to have profitable conversations with Creole and Mestizo business owners.¹⁴ Moreover, he did not have any family members living on the Island, so he often found himself getting replaced on pangas because the captains, or panga owners, would hire their family members even though Hugo was performing well as their diver. Despite these obstacles, he did stay busy working as a panga diver on Corn Island, and though he was never able to purchase a panga and run his own operation, he was able to easily support himself with the cash he earned.

It was not long after Hugo began panga diving that he met his future wife on Corn Island. Rosa had moved to the Island roughly ten years earlier with her mother, father, and three brothers. Her elderly father had hoped that her brothers would find work on the Island, but they earned reputations as unreliable workers and were finding it very difficult to find and hold jobs on boats. Rosa's family was struggling to keep the lights on in their small one room home and

they often ran out of food before the next small pay day would arrive. Hugo had been raised in a village where the Miskitu traditions of bride service and matrilocality were still routinely practiced, so when his wife suggested that they move-in with her parents and try to provide for the the larger household, taking on this responsibility felt like the right thing to do (see Helms 1971; Herlihy 2012; Jamieson 2003). Through his hard work and successes as a diver he was able to save enough money over the years to build and maintain two relatively large wooden houses, one for his in-laws and one for his growing family. Soon after Hugo was married, his earnings alone were supporting over a dozen people. He and Rosa had five children, and with each birth, his earnings were stretched further as he grew older and found it more difficult to dive for lobster. It was only a year after the birth of their fifth child that Hugo had the dive accident described in the opening paragraphs of this section. He attributed the accident to fact that he had not adjusted his dive practices to his older age and had pushed his body too far. As Hugo himself put it, "My body was softer, but I was diving the same way."

2.2.3 - Twice Hit by the Pressure

After the dive accident Hugo fell very sick and could not work for nearly two years. He sold the two houses he had built to provide the basic necessities for his family. Rosa was able to earn a small amount of money washing clothes for others, but they never had enough money to pay for all of their living expenses without going into debt. He tried to work with panga crews that fished or trapped lobster, but the work was too strenuous for his injured body. As Hugo continued to suffer from the effects of his accident, his oldest daughter was given an opportunity to work as a housekeeper with her aunt in the home of a wealthy U.S. couple living in Costa

Rica. If Hugo and Rosa could secure payment for their daughter's travel costs to Costa Rica, the aunt would be able to negotiate the rest of the arrangement. Their daughter's move to Costa Rica was viewed as an opportunity for her to improve her life and future, but could also result in the daughter making enough money to send remittences back to Corn Island to help her parents and siblings. To earn the money for his daughter's travel, Hugo went back to lobster diving.

Ironically, diving was one of the few forms of labor he was able to accomplish. The weightlessness that he experienced under the water facilitated a much greater range of movement than when he was on land, and it took less physical effort to accomplish tasks under the sea than it did for him at the surface; however, after two painful weeks of diving he was "hit by the pressure" for the second time. Although the second accident was not by itself as extreme as the first, the effects to his already damaged body were just as painful, and Hugo once again found himself on his porch, unable to move about the Island and search for ways to support his family.

Slowly he regained some of his energy and began gathering information from city hall about new government loans that were being offered to cooperatives that could create jobs. Hugo was well aware of the success Alonso had achieved in creating his cooperative on the cays, and planned to achieve something similar on Corn Island. Not only did Hugo face the same obstacles Alonso had reckoned with in terms of getting Miskitu members who did not fully trust each other to "cooperate," he also had to figure out ways to write documents in a formal business register of Spanish and be able to present mathematical projections of expenses and potential earnings. Hugo did not have access to a computer and would need help writing every sentence in dozens of complicated documents that would need to be submitted to government officials. He did not harness the same kind of social capital in the community as Alonso, and was not able to negotiate

assistance from the large seafood companies. The mayor's office agreed to help Hugo when the office secretary had the time to do so, but this left Hugo trying to work within a very slow and irregular schedule that was simply too inefficient to accomplish what needed to be done. What made things most difficult for Hugo was his constrained mobility. He could not afford to take a taxi or purchase a cell phone, and it took a very long time for him to walk short distances with his paralyzed leg. It was an extraordinary strain on him to connect to people, places, and resources, and to spontaneously emplace himself into situations where he might be introduced to unforeseen opportunities. He was also distanced from his original home, a place that would offer few resources to him after his ambivalent departure. Unfortunately, Hugo's ambition to create a cooperative on Corn Island was never realized.

2.3 - Mobility and Moral Becomings

The stories of Alonso and Hugo demonstrate how moral becomings, notions of personhood, and imagined futures, articulate through Miskitu notions of mobility and the positive qualities experienced through movements across broader vistas of time and space. While each story is unique to the individual described, certain themes running through the two narratives connect them to each other and to the many diver narratives recorded for this research. Below I provide an analysis of some the most prevalent themes that can help us understand the experiential qualities of mobility for Miskitu divers. I explore how these qualities emerged through certain historical practices and how certain specific experiential aspects of enskilled movement inform articulations of morality and personhood. A second reason for presenting the narratives above is to demonstrate how structural violence manifests itself uniquely within the

lives of individuals as they navigate the Caribbean Coast. There are critical moments in the lives of these men, where a particular manifestation of structural violence leaves them with a range of choices tied to local notions of care and social responsibility (see Mattingly 2014). Their decisions are always oriented towards their sense of the moral; they are ways of moving towards being a certain kind of person and living a certain kind of life—and at the same time moving away from, or becoming "free" of, an alternative way of being in the world (Foucault 2000b). Their mobility is a way of exploring moral possibilities, not necessary ways of living-up to a rigid ethical code of conduct (Zigon 2008, 2011). Moreover, each course of action places them in distinctive positions of vulnerability. Hugo, for example, must choose between participating in the war with his brothers, or making his own way. "The war," largely funded by the U.S. in an attempt to delegitimize and ultimately destroy the socialist Sandinista party in Nicaragua, directly effects social relationships within the family in this case. Hugo heads for the Coast and finds dive work, but his separation from family in his home village severs him from important resources and isolates him economically. The vulnerability emerging from this situation reveals itself when he becomes injured and finds that he has run out of economic options.

What added to Hugo's vulnerability, was his orientation towards bride service and matrilocality. All the lobster divers I interviewed said that traditional forms of bride service and matrilocality were rarely practiced on Corn Island by Miskitu people. They considered it a practice of the past, that would be more appropriate in mainland Miskitu villages, where the old people sometimes push for it. 15 Hugo took on the responsibilities associated with bride service on Corn Island and provided not only for his growing nuclear family, but also for most of his affines. He had committed himself fully to local cash-based (capitalist) economy, but he rejected

the propensity of local people to focus more on supporting their nuclear families and less on extended family. He did not send remittences to his home, but he distributed his earnings as if he was engaging in the long-term cycles of exchange usually associated with small-scale subsistence practices in his home village (see Jamieson 2003). For him, this was the ethical thing to do, an obligation and form of care that came with marriage. But long-term cycles of exchange are about histories of reciprocity, and in this case the giving was only moving in one direction. Although Hugo was a good earner as a diver, he found it difficult to integrate into the broader Corn Island community because of his lack of education and problems speaking Kriol English. He was regarded as an honest and reliable diver, but acopio owners did not think him savvy enough to be trusted with loans and the financial responsibilities that come with running your own panga dive operation. If he would have owned a panga and motor, his diving operation might have continued even with his disability. More than anything else, it was perhaps Hugo's loss of mobility that made him and his family vulnerable and their lives so very difficult. He even failed to use his daughter as a surrogate for mobility when he was unable to send her to Costa Rica. This loss of mobility was at the heart of his family's economic hardships, but immobility as an moral and embodied social phenomenon also seemed to structure Hugo's personal experience of suffering. These important relationships between movement, mobility, economy, moral becomings, and experience are explored further below.

2.3.1 - Mobility and Economy

When seasoned Corn Island lobster divers like Hugo and Alonso speak about the important events and experiences of their past, they often embed those experiences within a

narrative of work and travel along Nicaragua's Caribbean Coast and beyond. These men place a very high value on their ability to adapt to various social contexts and forms of labor as they move between villages and boats in pursuit of economic opportunities. To move about the Caribbean Coast and beyond not only demonstrates the uniqueness of Miskitu adaptability when compared to other ethnic groups in the country, but is also understood by divers as a fundamental and inalienable "right" tied to indigenous practices and their pre-colonial inhabitation of the Coast. When I arrived on Corn Island and began introducing myself to lobster divers, I was struck by how interested these men were in my past travels. In fact, the first forms of "common ground" established between us usually emerged from our mutual interests and experiences in traveling and diving in the greater Caribbean Sea. On several occasions, seasoned lobster divers (older and more experienced) promised to find their old passports so that we might compare our travels. They described in detail the diverse places existing along the Nicaragua's Caribbean Coast and encouraged me to see these places with a common directive: "You should go there. You can go anywhere here. It is a free country."

As I navigated Corn Island in the early months of my fieldwork, I tended to approach the spaces surrounding people's homes and businesses with pronounced caution. My intention was to demonstrate a respect for local spaces with careful approaches that would hopefully not be interpreted as encroachment. My new Miskitu friends would find my caution in such situations quite amusing. "Just go in, its a free country," they assured. I came to understand this continued attention to the freedom of movement as stemming in part from evaluations of our contrasting citizenships. Miskitu informants, friends, and acquaintances, would often remind me that I was welcome to move about and work freely in their country, despite the fact that they were not

extended the same courtesy by the USA. While these types of comments explicitly referenced their evaluations of US policies as unfair and discriminatory, the comments also indexed the high value placed on mobility more generally across Miskitu communities. This value becomes most apparent when divers speak of those situations when their mobility has been constrained. In the narratives presented later in this chapter, both men regularly generate moral discourse when they describe moments of constrained mobility. Interview data recorded among divers revealed three predominant and overlapping moral orientations related to mobility and economy.

- Mobility and Indigeneity. Corn Island lobster divers argue that they have "rights," as indigenous people of the Caribbean Coast, to move freely along Nicaragua's Caribbean Coast and it's undersea continental shelf. In limited ways these rights are reflected in the "Autonomous Regions" federal statute (1987), but the rights are also evoked as so essential to the indigenous people of the Coast that they ultimately supersede federal laws. Discourse on this orientation indexes a long history of interethnic conflict between the Miskitu people and Spanish colonizers, as well as the more recent wars and disputes with the Nicaraguan federal government and Mestizo migrants from the "Pacific side" of the Nation (see Bourgois 1981, 1982, 1985 Hale 1994, 1998; Barracco 2011a, 2011b).
- 2) Mobility, Subsistence, and Company Work. Despite the overwhelming, and relatively recent, turn towards industrialized fishing and a cash-based economy, thousands of families of villages dotted along the Coast still rely heavily on small-scale subsistence practices. These practices typically include farming nearby plots of land, complemented with prolonged journeys out into "the bush" (forest), or out on the ocean, to hunt and forage desired food resources that can be distributed to one's immediate and extended family. Many

ethnographic studies conducted in Miskitu villages have observed this practice of food distribution and its's centrality in maintaining long-term cycles of reciprocity and exchange between family members and community households (Dennis 2004; Dodds 1999, 2001; Helms1971; Jamieson 2003). These economic practices build a sense of cohesiveness within villages and can provide a system of support to families in times of need. They also directly reinforce the Miskitu notion of pana pana laka, a phrase that indexes the material importance and moral significance of sharing, cooperation, and turn-taking. Historically, Miskitu men have also migrated to find seasonal work with companies located far beyond the reaches of their towns or villages. Men have been able to earn cash, for example, by working in industrial agriculture, mining operations, or on large corporate owned fishing boats, and then return to their homes and families when they feel they have earned what is needed. These three economic practices, farming/foraging, part-time company work, and full time cash-based vocations, can be complementary or exclusive, but all of them rely on the ability to be mobil and successfully adapt to various social contexts. It should be noted here, that Alonso and Hugo both reject agricultural practices completely and will only work for cash.

3) Mobility and Personal Autonomy. In his ethnography on the "Miskitu People of Awastara," Philip A. Dennis (2004) provides unique analytical descriptions of Miskitu "individualism." He writes, "Both principals co-exist—individualism and reciprocity. Everyone seems to think the old pana pana laka is the right way to behave, but it contends with a fierce individualism and a willingness to defend one's own interests as vigorously as possible. Adults are notoriously independent. A common response about how Miskitu people do

something is: 'half do it this way, and half do it another way'" (97). My observations among Miskitu divers on Corn Island tend to align with Dennis's comments above. Most Corn Island divers certainly display a steadfast devotion to their immediate and extended families. In fact, I noticed early on in my research that divers usually began describing their families when they searched for ways to describe themselves. But this more socio-centric, relational orientation towards the self can be quickly backgrounded if a diver's strong preference towards a certain practice is challenged; or if he judges a situation as unfair and not in his favor. Hugo's brothers, for example, disapproved of his choice to leave his home village, but Hugo's moral stance was that he should make the decisions about his future. Likewise, Alonso says that it was "okay" that his father decided to leave. The injustice, according to Alonso's story, isn't so much that his father abandoned his family, but that his father took him away against his will. Corn Island divers prefer to have a significant amount of control over panga navigations and decisions regarding dive sites. Heated disagreements between the crew and the diver over dive practices will often end with ultimatums and the disintegration of relationships. It is no wonder that Corn Island dive pangas usually carry only one diver per trip. In these kinds of situations, constraining a diver's mobility and decision making power becomes an immoral challenge to their individuality, agency, and competence as a diver and Miskitu man. Divers will sometimes confront such challenges with moral discourse that indexes and performatively foregrounds a more autonomous self.

2.4 - Discussion

The sea and its resources penetrate into every aspect of daily life for Miskitu people living along the Coast. It is the location of vital subsistence practices, an entry point into the global market economy, and a primordial throughway by which individuals, villages, towns, and nations connect. It's omnipresence is often narrated as both benevolent and ominous in family histories. Beautiful, bountiful, and immensely forceful, the ocean has the potential to feed entire villages and the power to destroy them in a matter of hours with the delivery of large tropical storms and hurricanes. I have listened intently as Miskitu informants have commented on its beauty—usually as they view undersea video footage of themselves—but on a day-to-day basis, the sea is less a site of reflective wonderment and more a location for practical concern. In addition to hurricanes, it delivers foreign people and large ships full of new products that can improve one's livelihood or bring comforts into one's home. English Buccaneers began trading with the indigenous ancestors of contemporary Miskitu people in the sixteenth century, and today boats still arrive from around the world, some taking Miskitu men far away from their families so they may earn cash. The Caribbean Sea holds within it important commodities that can be harvested and hunted for monetary profit, such as lobster, shrimp, turtle, fish, conch, seacucumber, black coral, and those random bails of cocaine ditched by pursued drug runners heading north; but at a day's end, it may simply provide a modest meal for a single evening. The sea is indeed experienced as a dangerously vast expanse of water that must be navigated with caution, but importantly, it is also seen as a historical and contemporary conduit for economic opportunity, international contact, and the basics of subsistence. But to profit from the sea and its resources, one must harness more than mobility, one must learn to effectively *navigate*—a skill

that entails appropriate temporal orientations to inhabited spaces, so one recognizes the unfolding processes connected to one's projects. Unlike Hugo, Alonso had become had become an expert navigator of the Corn Island community *and* the undersea world.

2.4.1 - Chronos, Kairos, and Navigations of Structural Violence

In ancient Greece, two words were used for time: *chronos* and *kairos*. The former term denoted time quantified and sequential—the form of time most of the contemporary world associates with chronological "time keepers" and calendrical schemas. *Kairos*, on the other hand, referred to a notion of qualitative, indeterminate time, when one's capacity to orient towards a "right" moment with appropriate actions could reveal opportunities. It is no coincidence that the contemporary term for the weather in modern Greek is also *kairos*. For those who work at sea, "timing is," as they say, "everything," and timing is always tied to opportune weather conditions.

For the panga diver, there is an inherent tension between the responsibilities organized around chronological time and the favorable times for lobstering afforded by the oceanic and bodily conditions. The terrestrial social world in which we live offers fixed deadlines, due dates, appointments, and prearrangements, while the forms of engagement offered by the sea are always unsteady and entirely contingent. When it comes to lobstering, it seems that most things of work-related importance is arriving from somewhere else at an uncertain moment. This situation makes living near the Coast a perpetual reminder of the interconnected movements of phenomena across vast expanses of geographic space. Lobstering is exploration, but it is also a game of waiting and projection. Even for the most seasoned of seafarers, the trajectories and fluctuating qualities of oceanic currents, migrating lobster, and large storms, can seem erratic as

they move freely across the lines of the map with no regard for the predictions of weather forecasters and marine biologists. While divers wait for opportune moments to arise advantageous climatic conditions, for example—the responsibilities, obligations, and stresses bound to chronological time continue to press themselves upon families. Hugo reminded me regularly that his electricity bill would arrive each month, even if the lobster did not. This goes for many of those people whom rely on fishing to earn a living on the Caribbean Coast, but when compared to other forms of fishing and lobstering, panga divers can find themselves at a greater disadvantage. Panga divers do not just work on the water, they also work underneath its surface, and must therefore evaluate and contend with both surface and undersea conditions. Strong currents, cold water at depth, and poor undersea visibility are just a few of the adverse conditions that can drastically reduce opportune moments. In addition to these factors, they must also consider the readiness of their ailing bodies. Again, it is the quality of one's attunement to an ecology of movement that often determines successes and failures. Skillful orientations toward time and the ability to advantageously emplace one's self within a world in motion are essential, wether one is hunting lobster, or is moving along the Coast in search of new opportunities for work.

When lobster divers spoke about the value of mobility in their narratives of travel and exploration, it was not simply random movements across vast expanses of space that were emphasized as most relevant. They did not state the they traveled for the sake of travel alone. It is *skillful* movement that is valued, and this is always associated with *kaironic* orientations towards of time and processes. One must know when to move, and in what direction, in order to emplace one's self advantageously in relation to other moving phenomena. This priority of

recognizing the "right moment" to take certain actions not only assists one in becoming reliable, capable, competent, and "good" in one's work, it takes on moral significance in several other ways as well. Because recognizing and taking advantage of kaironic moments requires embodied skills, others in the community observe that a certain dedication and "care of the self" has been cultivated over time, producing positive qualities of character associated with preparedness. Work at sea is inherently precarious, and often dangerous, and this brute fact infuses the work with a distinctive moral significance. Seafarers who deny themselves opportunities to improve their skills or consistently make poor decisions at sea, make themselves and their crews vulnerable in the way they perpetuate dangerous situations and limit economic success. From a first person perspective, becoming a good crew member is experienced as a type of moral becoming, as one learns to consistently provide for self and family—as well as assist other crew in doing so—in a vocation that demands not only skillful assessments of opportune moments, but also efficiency in coordinated action and the appropriate performance of valued qualities mind, body, and self. The important *kaironic* qualities of movement are not only important to specific actions while working at sea, they are just as important to these men as they navigate the Coast seeking to emplace themselves in new forms of work or when attempting to resettle in a new place. The narratives in this chapter explore how these qualities of mobility have articulated differently for two men as they each moved towards becoming lobster divers within sociopolitical contexts of structural violence.

These men describe how structural violence not only constrains mobility in a quantifiable way, but also constrains the experienced qualities of one's mobility and diminishes its value. In the way structural violence operates as a process that constrains, suspends, and/or destroys

them vulnerable in distinctive ways that are linked to their situations and the socio-political context in which the they are immersed. The most obvious manifestation of this process is when individuals, families, or entire communities have had to abruptly migrate, evacuate, or flee because of war or inadequate responses to natural disasters by the federal government. Humanitarian responses to such circumstances usually attempt to quickly assemble basic material resources for people along unilaterally constructed timelines to alleviate immediate hardships and suffering. This basic form of response can be crucial to saving lives in the short term and can sometimes provide at least some percentage of the affected population with enough time to recollect their lives and start anew. What is also needed, and has proven far more difficult to achieve, is evaluating how theses responses might also facilitate Miskitu people's own enskilled efforts to (re)emplace themselves socially and economically at the moments they themselves feel would be most opportune. Alonso traveled and took time to evaluate his options as a young man and was able to make some advantageous decisions with help of his step-father.

While inaccessibility of important material resources and the aftereffects of war and natural disasters can magnify the vulgarities of structural violence, as a process, structural violence can operate far more covertly in daily life. A lobster diver's experience of the tension between chronological time and *kaironic* time is one such example of structural violence rendered largely invisible for much of the non-Miskitu community on Corn Island. These men prefer to choose when and where they will dive for two important reasons: (1) only they know when their body is ready to endure diving a certain location in a certain way (see Chapter 5), and (2) because they are far more familiar with the undersea environment then those who do not

work undersea, they feel they are much better at evaluating when and where the lobster will be found (see Chapter 4). The responsibilities, obligations, socio-economic pressures bound to chronological time can cloud evaluations of the "right moment" to dive certain locations, and this can mean wasting fuel and going into debt in search of lobster, or even worse, injuring one's self because the body was not ready to endure the hardships of deepwater diving. Few outsiders can see the many obligations faced by these men and their families, and even fewer understand the forms of betterment they commitment themselves to as they calibrate and recalibrate their moral compasses and embodied skills to navigate this context of structural violence. The narratives in this chapter demonstrate the importance of enskilled mobility and its relationships to advantageous timing, and how vulnerability emerges and transforms through one's moral navigations of structural violence.

NOTES CHAPTER TWO

- ¹ I do not mean to contend that knowledge is not gained through interactions with others.
- ² Corn Island Miskitu divers tended to avoid opportunities and requests to narrate their personal histories; however, they sometimes provide short narratives of important events in their lives. The narratives I have constructed in this section and the next have been pieced together from stories emerging in different times and social contexts.
- ³ It seems the term "Miskito" emerged through the contact between the Coasts's indigenous people and colonial-period Europeans. Miskitu people consider themselves indigenous to the Coast, but also recognized that they are a mix of the many different ethnicities and races that been absorbed into Miskitu communities (by invitation or conquest), including Africans who escaped colonial slavery or arrived on merchant ships.
- ⁴ Translated from Kriol English.
- ⁵ Bluefields is the capital of the South Caribbean Coast Autonomous Region. It is the largest city on the Southern Caribbean Coast.
- ⁶ Corn Island is no longer a port for lobster diving ships. All lobster divers on Corn Island are now "panga divers"
- ⁷ Archaeological evidence points to an indigenous inhabitation of the Island prior to the Creole. Some Miskitu leaders also claim the Corn Islands as part of their ancestral lands.
- ⁸ Translated from Kriol English.
- ⁹ There is ethnographic research suggesting that Miskitu people understand ethnicity not as an essential aspect of an individual, but as qualities performed (see Jamieson 2003).
- ¹⁰ Bilwi is the capital of the North Caribbean Coast Autonomous Region of Nicaragua. It is the largest city of the region and is the location of the Caribbean Coast's only hyperbaric chamber (used to treat decompression sickness, a.k.a. "the bends").
- ¹¹ Translated from Kriol English.
- ¹² Translated from Spanish.
- ¹³ Creole Islanders claim that the population grew abruptly from a few thousand to between nine and ten thousand during this decade.
- ¹⁴ The large Mestizo population that has migrated to Corn Island has come with the intent to open stores and sell things to lobsterers. According to Islanders, "Spanish" people do not fish. Creole people, however, also own many businesses on the Island. Very few businesses are owned by Miskitu families.
- ¹⁵ This is not to say that they will not attempt to provide for their affines if they are struggling.

CHAPTER 3

ETHNOGRAPHIC IMMERSION AND EMBODIED REVELATIONS OF DESCENT

"Ethnographic fieldwork can be more than uncomfortable, it can be downright painful." I wrote this statement in my field notes the evening I returned from my first trip out to sea with Corn Island lobster divers. Corn Island divers utilize fiberglass skiffs measuring approximately twenty feet to accomplish their work. Following the trend throughout much of Latin America, they refer to these skiffs as pangas. Pangas are light, durable skiffs that displace relatively small amounts of water when compared to other kinds of boats. They ride on top of the water, over the waves, rather than breaking through approaching waves the way that displacement boats do. This is especially true when they are propelled by a strong motor on the back that can lift most of the skiff's front end out of the water. The design makes for a very fast and light boat that will often take flight after racing up the front of an ocean swell like a large ramp. The pain comes when the panga slams back down to the surface of the sea. Sitting on the hard fiberglass seats as we motored one or two hours to a dive site proved to be an excruciating experience. The panga would race up a swell and take flight, and when it landed I would feel the bones in my body rattle and shake. A sharpe pain would then surge up from my lumbar to my lower neck. Part of my pain was due to my positioning on the panga. Dive pangas usually carry a crew of three: the diver, the motor-man, and the bubble-man. The diver and motor man sit at the very back of the boat, near the motor, where the distance between the bottom of the boat in flight and the surface of the water is much less—they crash down from a lesser distance, and therefore not nearly as hard. The bubble-man stands just forward of the panga's midpoint holding a line attached to the

boat's prow like a cowboy holding the reins of bucking bronco. He holds the line while he uses his balance and bent knees to effectively absorb the impact of slamming back to the surface. The anthropologist gets the worst seat, near the midpoint of the panga where he can not avoid getting launched from his seat and crashing back down every ten seconds.

When I began diving with local lobster divers, the days were even more exhausting, despite the fact that I would do only two dives per day compared to the twelve dives that the local diver would typically accomplish. Unless the discomfort was dive related, panga crew members would not typically display their fatigue while at sea. When we arrived back to port, however, we would sometimes catch ourselves, and each other, stretching and subtly grimacing while unloading and cleaning the panga, therein revealing a sense of relief that another strenuous day of work had finally come to an end. We shared a very small space in this panga for eight hours a day where coordination was not just expected, but necessarily. We knew that we shared the pains of this difficult work, even if we did not speak about it much. From the very earliest days of fieldwork among Corn Island lobster divers, it was clear to me that the emplacements and engagements of my own body, and interactive constitutions of my embodied experiences, would be a critically important aspect of my methodological took kit. The research aims of this dissertation would not be possible if I had not joined lobster divers under the sea as they did their work. It was not until I descended below the surface with them that I was confronted with both the enormity and opacity of the environment in which they accomplished their work. It was then that I began to seriously consider how it was they were able to identify the most relevant aspects of this environment through unique sensory attunements that would structure the ways in which they attended to phenomena. How would these attunements create unique perpetual fields of this

incredibly opaque environment where some things would become more relevant than others through certain forms of movement and interaction, and how much of their perceived world would be "revealed" to me through our embodied navigations of this particular ecology of technological and natural materials (cf. Bateson 1972 [1955]; Gibson 1986)? The embodied methods employed for this research and their significance, in addition to a more detailed rational for the focus on embodied action more generally in this study, are two central topics in the first half of this chapter. In the second half of the chapter I provide a brief summary of oceanic physics to illuminate the many environmental adversities encountered when the human body is emplaced within the undersea world.

3.1 - Enskillment as Ethnographic Method

Following Corn Island lobster divers into the undersea world would mean diving into processes of enskillment for myself. By this I do not mean to say that by becoming a temporary member of this community of practice, I came to inhabit and perceive the world just as they do. The "sedimentation" of a history of interactions within the particular social and material environments I had encountered throughout my life had shaped the embodied knowledge I brought with me to Corn Island and my undersea navigations their (see Connerton 1989). Besides, I rarely dived using the equipment that they used and never did more than two dives a day. I never put myself in the position to experience intense fatigue from diving or the symptoms of DCS. That said, through my interactions with CI divers, I did come to engage with the undersea world in ways I had not before, and these new forms of engagement did, to some extent, change the way I experience the oceanic environment to this day. CI divers found it

difficult to articulate the details of their dive practices verbally. Our excursions together and use of video facilitated opportunities to point to the aspects of lobster diving that were so taken-forgranted by these men that they did not really know how to describe them to me effectively. Together we worked to find a common language to refer to those details of practices and processes we identified as significant so we might together come to reveal the complexity of their work and the unique ways in which they experienced the environment and their ailing bodies.

Below I briefly describe some of the training I underwent in becoming a "certified" scuba diver in the US. I offer this narrative of training not as a form of reflexivity that might reveal to readers how and why I have come to construct a cultural group in certain way through my textualization of them in this dissertation—though this may indeed be a byproduct to some degree (see Clifford and Marcus 1986; Bahar and Gordon 1994). In the introduction of this dissertation I pointed out that the ways in which material cultural (technology) is harnessed to perform certain embodied practices would be an important aspect of the analyses in this manuscript. But we need to acknowledge that the dive technologies used by CI divers were designed to be used in collaboration with other technologies that these divers do not have access to. To better understand why these technologies were developed in a certain form, we need to assess how they are related to the other technologies that are not present. Moreover, the assemblage of equipment used in collaboration, as they were designed to be used, work to structure certain forms of interaction with the undersea environment and the body, and in this way they contribute in shaping the ways in which "cert-divers" come to attend to the environment and themselves while diving. In short, a brief comparison between professionally

trained divers and CI lobster divers, in terms of technologies and practices, will contribute to our exploration of why CI have come attend to certain embodied actions and processes in ways that (sometimes inadvertently) compensate for equipment that they do not have.

3.1.1 - The SCUBA Certification Process

Several years back, on a calm and hazy spring morning, nine first-time "open-water" scuba divers, including myself, were motoring slowly in a forty-five foot sport boat roughly 26 miles off the coast of Southern California near Santa Catalina Island. The boat dropped anchor near "Ship Rock" and we prepared our equipment for our first dives on our way to becoming certified scuba divers. After running through the normal check lists while inspecting the conditions of our equipment, one by one each novice stepped off the stern of the boat adorned in elaborate—and incredibly cumbersome—equipment from head to toe. Before the last novice diver, myself, could enter the water, others were already confronting some serious problems. The haziness had lifted and a light wind was strengthening out of the north, creating an uncomfortable "choppiness" on the water—a frequent and steady flow of small waves on the surface of the sea.

As I stood at the transom I could see that one of our novice companions, Dee Dee, had floated a considerable distance from the boat and was beginning to cough violently. She looked scared and on the verge of panicking. She began shouting, "I can't breathe, I can't breathe, I need some help!" It looked as if her head was not fully above the water and the small waves one after another were crashing into her face. From where I was standing, I could see that fear was beginning to overwhelm her and soon her arms began to flail as she starting yelling for help. Our

instructor responded quickly, swimming towards her as he called on her to inflate her "BC" and insert her "regulator." Another student yelled that she should "turn leeward," so that the small waves would not hit her in the face. The instructor effectively calmed Dee Dee and swam her back to boat and I lent a hand in getting her back on board. Meanwhile, another diver in the water, who had been nervously hanging on to the swim-step at the transom of the boat while Dee Dee was being rescued, began vomiting. He had been feeling nauseous all morning and seasickness had finally caught up with him. Into the boat he came and we were down to seven new divers. At this point the others had been bobbing around in the ocean for quite some time and were growing fatigued in their struggles against the wind and the relentless small waves. Another diver, lets call him "Diver Dave," approached the swim-step with a pale face and chattering teeth. He complained that he was shivering uncontrollably and was experiencing intense cramping in his calf; out he came and we were down to six.

I entered the water and the instructor gathered the remaining six of us together and asked if we were all okay. After each us responded to him with the proper "okay" hand signal, he then instructed us to begin our descents. I clinched the deflation button on my "BC" (buoyancy control device) with my left hand and as the air slowly escaped the vest I began to sink beneath the surface in the proper vertical position. With the BC emptied, I let go of the deflation button and clutched my dive console/computer with the same hand so I could track the changing depth and temperature during descent. Remaining in the upright position, I used my right hand to pinch my nose and clear the air out my ear canals as the atmospheric pressure steadily increased. My mask was fogging a little, but I was content that it was not leaking, it had a "good seal." As expected, the cold sea water began penetrating my wetsuit, producing an invigorating and

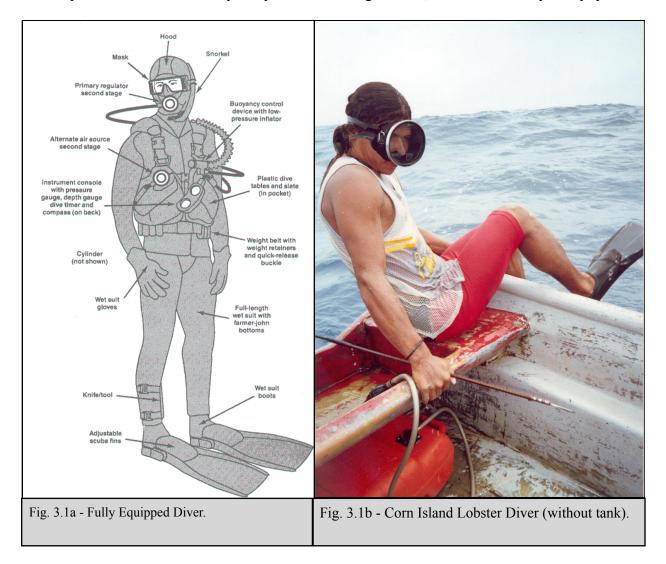
somewhat uncomfortable chill. I reminded myself that the heat of my body would soon warm the thin layer of water between the suit and my skin. I reached the ocean floor and rested on my knees with a sense of accomplishment, but alas I realized that I had broken the cardinal rule of scuba diving: never separate from your "dive buddy," or in this case, dive buddies. Alone sixty feet under the sea, I looked up and saw that none of the others were descending. I contemplated the need to surface, when suddenly a very large curious sea lion appeared in front of me. She swam up close, stopping only a few feet away from me, and took a long look at my face. I was startled and a bit frightened. She was not displaying aggression, as far as I could tell, but her enormity and the swiftness with which she moved was intimidating. Her exterior was so sleek, her movements were so beautifully smooth. And she was so fast! Her presence evoked a sobering realization of her environmental belonging versus my own alienation. The pace of my respiration increased dramatically and as the expiration bubbles shot out of my regulator with an increasing force, I was reminded of just how dependent I was on this breathing apparatus. I was confronted with something thrilling, the fact that I was entirely out of place at the bottom of this ocean. The sea lion circled me several times, looked at me inquisitively, barked in my face, and then was gone as quickly as she had appeared. Looking up I could see that the other divers were now descending, the playful sea lion, however, would not return.

We congregated where the ocean floor was sandy so we could practice and be tested on some skills that we were expected to develop. Each of us, one-by-one, took off our mask and put it back on, and then cleared the water from inside the mask with a tilt of the head and a forceful blow through the nose. We practiced neutral buoyancy—staying suspended in one place—by properly inflating our "BCs" and practicing steady breathing. Those having trouble with neutral

buoyancy would either inadvertently ascend or sink to the ocean floor where they would kick up the sand and produce large murky clouds around our group. Apparently I had "trimmed" appropriately, as I did not feel my heavy lead belt, or any other gear, pulling me out of proper positioning. After being tested on several other skills, including the use of several hand signals, we practiced our underwater movement. Displaying different forms of "finning"—that is, ways kicking with our fins to generate propulsion—was required of each novice. We were taught to stay horizontal, with arms held close to the sides of the body or out in front of us, and to use "flutter kicks" or "frog kicks" for the majority of maneuvers. The goal was to move slowly, to breathe regularly, stay neutral, and to avoid exerting too much energy. Towards the end of this dive, we practiced using "alternate air sources" by switching to our own "second stage" (a backup regulator), and by practicing "buddy-breathing," where a single regulator must be shared between two people by passing it back and forth. All the while we frequently checked our dive computers to track depth, time underwater, temperature, nitrogen absorption, and air availability. Our last exercise involved an "out of air scenario," where we were tested and corrected on appropriate communication and the proper techniques involved in an "emergency assent." After roughly forty minutes of this undersea testing and training we surfaced, re-boarded the boat, and excitedly checked our computers to assess the profiles of our dives so we could plan subsequent descents.

Again, I have not included this narrative not as a simple anecdote to demonstrate my own training in scuba, but as an illustration of the complexity of the equipment, technique, and terminology, that is packaged as necessary for safe scuba diving. This group of novice divers had already completed many hours of both classroom and pool training as organized by a

professional instructor over the course of several weeks. Yet, three of our group confronted serious problems on that first day of open-water diving. Indeed, an elaborate array of equipment



and technical training is needed to overcome unique and demanding environmental conditions of the undersea world (see Fig. 3.2a, 3.2b). Importantly, this equipment is designed to be operated in conjunction with the specific scuba practices presented above, and thus, the equipment is designed to structure a particular form of engagement with the undersea environment. Miskitu lobster divers do not have access to most of this equipment, and as we will see, even if they did, it would probably not be suitable for the kinds of embodied engagement they have developed in

conjunction with hunting lobster. The professional training described above provided explicit instructions on how we should attend to our bodies, equipment/gear, and the environment. What was far less obvious at the time of training, was how this education was, by directing our attention to symbolic representations of ecological processes (on our dive computers, for examples), training us to tacitly attend to the our bodies, gear, and the environment as separable and detached entities. It was not until I tried using the gear utilized by CI lobster divers that I was confronted with my overwhelming reliance on these representations over bodily indexes signifying my immersion and movements within a particular ecology. The section below explores my reorientations towards my equipment and dive practices.

3.1.2 - Diving with Elvis

Before conducting fieldwork on the Caribbean Coast of Nicaragua, I had not met single person named Elvis. I am now acquainted with four Elvis's to date, all of them Miskitu. I have never asked any of the them how the name came to them; some mysteries promote a kind of pleasurable wonderment that is best left alone. Elvis the diver was somebody who did not want to be a lobster diver at all. He was in his early twenties and planned to attend a university in Bilwi. He had only a year of experience lobster diving when I met him and had come to Corn Island to dive for only a few more months so he might gain the money needed for school. I only went out to sea with him twice, but each trip made an indelible impact on this research.

Elvis was an energetic questioner and displayed a unique curiosity regarding technologies, people, and the world beyond Nicaragua. He came to visit me in the evening after our first trip out to sea together. He wanted to know more about the design and functions of my

scuba equipment and view some of the undersea video footage I had recorded. Following my usual procedure in such circumstances, I video recorded the two of us viewing and discussing previous video recordings and the equipment that was of interest to him. Most of his inquisitiveness was directed at my dive computer. He asked me to explain the information that it provided and how I used it. I turned on the computer and started describing the different functions. I demonstrated first how it displayed the time of day and the amount of time spent underwater. I then explained how the computer tracked the rate of my assents and descents by measuring changes in atmospheric pressure. If I was ascending too fast, flashing icons would indicate that my actions were unsafe. The computer also displayed the water temperature, the number of dives over the course of a day, and perhaps most importantly, the amount of nitrogen absorbed into the body. "You have to look at this all the time so you can know?," he asked. "Well, not all the time. Mostly when you are going down to the bottom or coming back up," I replied. "But you can not see where the lobster is if you are looking at this," he insisted. Not yet understanding at that point in time that CI lobster divers identify most of the areas they choose to hunt as they descend and ascend (because of the vantage point), I offered what I thought was reassurance of the computer's usefulness by explaining to him that a person need not look at the computer continuously while at the bottom, where the lobster are located. Turning his attention to nitrogen absorption, he asked if it "tells you the pressure in the body?" I paused a briefly to think about what he had just asked and realized in that moment that when CI divers spoke to me about "the pressure," they were likely referring to pressure from without and pressure from within. This was perhaps why they did not typically speak of nitrogen, even though they knew it contributed to DCS. "So with this you know why the water gets heavy, right?" he continued.

Knowing that when these divers spoke of "heavy water," they were usually referring to their embodied experiences of constrained mobility at greater depths as fatigue set in (as well as pressure in the body), I realized that Elvis was orienting towards the computer's capacities in a way I had not considered. He was evaluating the different functions as they relate to each other and correlating them to his embodied experiences of what it felt like as he moved through the depths of the sea. From his perspective, knowing the amount of pressure from without (the depth indicator), and the pressure from within (the nitrogen indicators), in addition to the temperature of the water, the amount of time spent underwater, and the amount of air in one's tank, could indicate how the body should feel at a certain point in a day of diving. Of course, he did not use a dive computer, so he would need to use the movements and interactions of his body to evaluate such phenomena (as well as other phenomena not perceived by cert-divers).

I realized that my own scuba training had taught me to attend to symbolic representations of discrete phenomena on my computer to evaluate their statuses. For example: if the air pressure gauge indicated that the air was low in my tank, it was time to surface; if the computer indicated a large amount of nitrogen my system, it meant more surface/rest time was needed; if icons flashed and indicated I was ascending too fast, I would slow my assent. I did not have a point of reference, or the (tacit) embodied *skills*, needed to judge how all of these phenomena interacted within the larger environmental ecology in which I was immersed to establish a certain kind of feeling in the body. And by extension, I also did not have the skills to evaluate how certain kinds of feeling in body indexed the changing statuses of these phenomena and how that might eventually affect my safety and health. A cert-diver is trained to stabilize the condition of her body by breathing regularly, moving slowly, and keeping the heart beat at a steady pace. For the

rapidly moving lobster diver who is working while under the sea, this kind of stability is not expected, and perhaps not even desired, as fluctuations in breathing, heart rate, and quality of movement while performing certain activities assist in assessing bodily and environmental conditions. All of this was proven when I used Elvis's equipment one day instead of my own. As I started my decent I came to feel more vulnerable than ever before while diving. Without my computer, air pressure gauge, and BC, I did not have the embodied ability to discern my dive profile (or the ability to properly control and balance my own body). My estimates of time underwater, air in tank, depth, nitrogen saturation, etc, were dangerously inaccurate. Below, Fig. 3.2b lists the equipment used by cert-divers compared to Corn Island divers. In later chapters, I explore exactly how CI lobster divers attune to the the otherworldliness of the undersea environment using the equipment available to them and an array of embodied practices, but first I explain below the significance of focusing of non-propositional knowledge in this research and methods I employed to accomplish research goals.

Fig. 3.1c - Equipment used by Cert-Diver vesus CI Diver

	Standard SCUBA Equipment	Cert. Diver	CI Diver
1)	Mask	X	X
2)	Fins	X	X
3)	Tank W/Strap	X	X
4)	Snorkel	X	
5)	Buoyancy Control Device (Vest w/air bladders that assists in maintaining proper buoyancy)	X	

6)	Regulator One (Delivers air from tank)	X	
7)	Regulator Two (Back-up)	X	
8)	Weight W/Belt	X	
9)	Wetsuit	X	
10)	Neoprene Gloves/Boots	X	
11)	Death Gauge	X	
12)	Air Pressure Gauge (Indicates the amount of air in tank)	X	
13)	Compass	X	
14)	Dive Computer (Basic features include: time underwater, rate of accent/descent, amounts of nitrogen absorbed into the body, number of dives, and water temperature.)	X	
15)	Knife	X	

3.1.3 - Portrayals of Lobster Divers, Discursive Consciousness, and the Pre-Objective

In their (rightful) ambition to illustrate the extreme dangers and brutality involved with this kind of diving, both academicians and journalists must share the burden of having portrayed these diving procedures as simple and primitive. One of the more pervasive illustrations of dive practices in research articles, for example, states that Miskitu men dive to great depths unknown to them, where they spend hours "plucking" lobster from the ocean floor. Strangely, "pluck" and "plucking" are words used by several different authors when describing Miskitu lobstering techniques and the truly disastrous circumstances divers encounter when entering the water.

Most articles focus on the primitivism of the dive methods for good reason: the fact that men are dying, literally risking their lives everyday in inadequate and insufficient gear to earn money and

provide for their families. Nevertheless, these divers do not simply swim down and "pluck" lobsters off the bottom; they must learn how to hunt for these illusive creatures in an incredibly unique and demanding environment. I will argue that Miskitu divers have a complex embodied knowledge of their work with close examinations of the ways in which they accomplish huntingfor and finding lobster. If this manuscript, or any other for that matter, is going to make knowledge claims about the "diving problem" and its corresponding practices, we should start with the divers themselves and detailed first-hand accounts of their daily actions, including those actions taking place underwater. One of the difficulties, however, in constructing a more accurate account of these dive techniques is that the divers themselves do not necessarily perceive, experience, nor describe their occupation as extraordinarily intricate and skilled.

Previous descriptions of lobster diving practices have typically (and understandably) relied heavily on relatively distant, short term observations and/or narratives provided by local divers. While generally successful in illuminating overviews of the problem, both researchers and journalists have not *positioned* themselves appropriately to have the complex skills involved in lobster diving in Atlantic Nicaragua *revealed* to them. Even the most conscientious of researchers can forget of the narrative strategies employed by individuals; for even in extreme, dangerous, troubling situations, narratives resist transparency and can be tacitly understood by narrators as pragmatic and socially consequential (Humphrey 2005). Suffice it to say, much is at stake for these men, and they are typically trying to do something with their narratives when they take the time to interact with a stranger. Lobster divers have often oversimplified their work when asked about it because of their (understandable) focus on acquiring resources that will help them to better navigate an incredibly dangerous occupation; they are quick to point out that they

do not have the equipment and training needed to do their jobs professionally. Shortly after explaining to a foreigner, such as myself, that they do not have access to the proper resources needed to do their work, they will usually suggest that you acquire some equipment for them; thus, the divers sometimes purposely, or perhaps at times unconsciously, avoid articulating their skillfulness and knowledge to outsiders and instead focus on what that foreigner might do for them if they are sufficiently convinced of their hazardous predicament; a sensible strategy for these men, who generally see curious foreigners as either people who might help them or as people who want to get profitable information from them. Moreover, these divers do not have a shared professional language among them because they do not receive formal training and typically receive little or no informal hands-on instruction from their peers. One of the strengths of ethnographic immersion as a research tool, however, is in the way it affords discoveries of what is being left out of local narratives.

A second significant explanation as to why we lack more detailed information about the complex skill set embodied by Miskitu lobster divers has a lot to do with the the fact that propositional knowledge of their own dive practices is only part of their overall knowledge. Most of their occupational knowledge is tacit and residing in the body, the character of which they are only marginally aware of at best. A tacit embodied knowledge of lived (underwater) experience is what allows divers to maintain equilibrium, neutral buoyancy, and bodily orientations underwater without consciously "thinking" of accomplishing these maneuvers, so they may focus on the activity of hunting lobster.

As so many studies in the humanities and sciences have already shown us over the years, we all need this form of knowledge to move about efficiently each day; we simply cannot, and

do not, direct our attention to the details of every movement and sensation simultaneously acquired from each sensory modality to shape our conscious evaluations and choices. Classic example's of this phenomenon include that we cannot focus on every object within our field of vision, yet somehow much more than what we directly attend to has a perceptual *presence*. Nor do we attend to each of our own words before they are spoken, yet somehow they tend come out in a coherent order even if we cannot recall exactly what we just said. We do "know," however, or at least have a sense of, the whole of the scene in front us and what it is we are talking about as the words emerge. People harness their actions appropriately and effectively in the flow of everyday life without having to continually reflect—and we cannot recall the details of many phenomena and corresponding actions even when we try. Phenomena within our environment are therefore variously *present* to consciousness, some things being foregrounded with attentional focus while others take on a more or less backgrounded presence while still tacitly structuring the unfolding of embodied action and phenomenal experience. Thus, varieties of presence situate phenomena as more or less available to consciousness and limit our ability to identify and classify them discursively. This non-propositional aspect of phenomenal experience that eludes discursive articulation is what Merleau-Ponty (1962) calls the "pre-objective," a substratum of embodied perception that feeds into, but is also fed by, "body schema," the sedimented tacit embodied knowledge created through habituated bodily practices (see Csordas 1994a, 1994b). Distinguishing these processes has lead phenomenologists to treat experience as always seeming to outstretch determinations, language, and the propositional world, and tends to direct these researchers towards explorations of the immediacy of felt life to better understand perception.

That said, each person's tacit embodied knowledge grows out of, and into, their own ongoing interactions in their own intersubjective cultural worlds.

This phenomenon of non-propositional knowledge and pre-objective modalities of experience, along with the fact that these divers are not introduced to a standardized professional language for their dive practices, sometimes leaves them preferring to say less to outsiders when explaining the *how* of their occupation. Below is an example of a 28-year-old veteran diver explaining to me in a first-interview how he does his work. I present this as example of the minimalist kinds of responses that I received about diving.

Clint: So, so, how do you dive for the lobster? What are...the steps? (3 second pause) I mean, what do you do to get the lobster and kill them when you are underwater? Diver: He, the man he gives me the tank from the panga and I go down. You lookin for the lobster and see one big rock and go kill the lobster. Afterwards, afterwards, you killin, killin, then come back up. (smiling) Yes, that's it. Clint: But how do you know where to go to find the lobster? Diver: You just find one big rock. Clint: And how do you kill them? Diver: You find one rock where the lobster is. You got to kill them.

Despite persistent probing, for the next six minutes of the interview the diver more or less continues to repeat what he said in his first answer with little new information offered. After six minutes, the diver transitions into a different topic where he explains with improved detail that divers "can't get no help from the government." Discussions of dive practices improved greatly after I began accompanying divers at sea and gained a better understanding of their work and how they talk about it (see Briggs 1986). But it was after I began diving with them and witnessed

how efficiently they moved and navigated the unsteady underwater environment, that I formulated a new set of research questions that focused on sensory experience and bodily attunement. Since most of my new questions unwittingly sought non-propositional knowledge, obtaining what I evaluated as useful answers was arduous as long as I relied on talk. Take, for instance, this excerpt of a conversation recorded in my field notes where I asked a diver about auditory perception when he works underwater.

Clint: Do you hear anything underwater? Diver: No, you don't hear. Clint: You can't hear anything? Diver: You can't hear too much. Clint: You can hear a little bit? Diver: You can hear, but just a little bit. Clint: Do you listen for anything? Diver: You can't listen for nothing. Clint: Can you hear the motor of the panga? Diver: Yes, yah you can hear it. Clint: Do you listen for the motor? Diver: You can hear it. You can hear it there (he points upward). Clint: I mean, well, what if the sound goes away? What if you don't hear the motor? Diver: If I can't hear the motor I come back up. Clint: You come back up to the surface. Diver: Yes because that's my life, you have to come up. You don't mess with that, that is most important. Clint: You know they lost the bubble? Diver: Yes, them done lost me, I gotta come back up so them can find me. Clint: Do you ever just stay down and wait for them to find the bubble? Maybe you found plenty lobster. Diver: No, I come back up. That's important you know.

These kinds of conversations, where the diver appears to contradict his initial answers about sensory experience, were frequent and initially frustrating. First he tells me that he does not listen for anything when underwater, then after further inquiry seems to indicate that listening for the motor is very important, a matter of life and death even. Were divers just getting tired of

my unrelenting questions, refusing to put serious thought into their answers with hidden hopes for my surrender as "researcher"? A motivation to divert the conversation is plausible, with some divers more than others, but there are other reasons for these kinds of confusing answers. In truth, his description is much closer to his embodied experience than my presumption that he does indeed listen for the motor with concerns of being lost. This diver does not direct his attention to the motor's buzz because of its ubiquity. As a panga diver, the buzz of the motor is constant, it is always present because the crew is committed to following the bubble trail directly above. It is not until that buzz loses its robustness and begins to fade that the diver diverts his attention away from lobster hunting and decides to surface for safety reasons. What the diver "listens for," while working is a dangerous impending silence. It is not simply the sound waves produced by the motor, eventually reaching the ear, that explains "hearing" in this context. The sound made by the motor is backgrounded in his consciousness as he directs his attention to other activities and sensory orientations that help him hunt lobster. When the sound of the motor dissipates or disappears, the question of the location of the panga is then consciously foregrounded; thus, he only directs his attention to the sound in its absence--or impending absence--raising interesting questions about when the motor and crew are most *present* for him while underwater, and thus how the panga/crew are differentially felt, imagined, and attuned to while he works.

Had I not participated in their work—diving with these hunters as they traversed the floor of the sea in search of lobster—I am not confident that I would have pursued questions about perception and the senses so persistently. Perhaps I would have accepted the first answer to the first question asked regarding audition underwater. And, having received similar responses from

several other lobster divers, here in this dissertation I would have unconsciously tapped the imagery and affectivity crafted in those old poems about "the silent depths of the sea" when describing how divers "don't hear" anything when working underwater; thereby propagating erroneously the notion that they experience only quiet, ominous solitude during this dangerous work. This is not to say that the strip of conversation presented above is not analytically useful and revealing. The emergent contradictions in the discourse index the non-propositional character of an undersea embodied experience, as well as the inherent ambiguity experienced when reflecting upon the ways in which sensed and attended to phenomena are foregrounded and backgrounded in one's consciousness while in the mist of action. The next question then is how is this knowledge grown into these individuals, and how do we identify and track these processes of enskillment?

3.2 - Oceanic Physics and the Submerged Body

This section presents the universal adversities posed by the physical properties of the sea with which all divers must somehow learn to contend. The principle reason why seawater posses such challenges to scuba divers stems from water's molecular density and weight, which profoundly effects buoyancy, the refraction of light, atmospheric pressure, and thermodynamics. All of these physical features have profound effects on the senses of the submerged human body and must be briefly elaborated upon here to provide some context in regard to the universal physical demands placed on the submerged body. Providing this kind synopsis of physical processes and "laws"—as determined through the scientific theories and methods—is certainly not the trend in current anthropological studies of "experience." This seems especially true of the

sociocultural and psychocultural studies of experience that are heavily influenced by the classic works in phenomenology cited in the introduction off this dissertation (see Jackson 1996). It is the focus on the influences of a material world in shaping forms of interaction that calls for an examination of oceanic physics in this dissertation. Aligning with many works inspired by phenomenology, this research focuses on how people come to inhabit and experience the lived world through their interactions. But the sections below are presented to remind us that the physical world, as diversely meaningful in experience as may be, plays a central role in situating, coordinating, and organizing bodies. This becomes more obvious than ever when we look at the differences between the terrestrial worked and the undersea world, and howe they contain and enable the movements of bodies so differently.

3.2.1 - Seawater, Weightlessness, Proprioception, and Equilibrium

When we submerge ourselves in the sea, we enter into a substance more than eight hundred times denser than the air normally enveloping us. The density of this substance corresponds with its increase in weight, a cubic foot of air weighing 1/12 of a pound, while a cubic foot of seawater weighs approximately sixty-four pounds. Water is so dense, in fact, that unlike air it cannot be further compressed. Without delving into the details of water's molecular composition, however, we know as soon as we enter the water we must contend with an increase in density. The weight of the water exerts pressure on all points of contact with the body and we feel our movements slow as we must displace it and push it out our way to relocate ourselves. Contending with the increased pressure and the physics of displacement are two of the most important aspects of scuba diving.

Gravity is still asserting its force when underwater, but because the density and weight of the water displaced is usually greater than that of the human body, the body is pushed upwards to the surface, thus becoming buoyant. Every functional boat ever made relies on this rather simple principle to stay afloat. Scuba divers add substantially to their *positive buoyancy* by donning large assemblages of gear that are not as dense or heavy as the seawater it is meant to displace. To counteract the addition in buoyancy relative to equipment, divers wear lead weights around their waist areas—the usual amount being roughly ten percent of one's body weight—to achieve a slightly *negative buoyancy*. A diver can, in turn, compensate for the negative buoyancy caused by the lead weights by inflating his BC vest with air supplied from the tank strapped to his back. Dee Dee, introduced in the dive narrative presented above, had "overweighed" herself with her lead belt, and the buoyancy of her BC was not keeping her head as high above the surface at it could have. She kept trying to inflate it further, but as she began to panic and expand her diaphragm with rapid breathing, she felt a greater squeeze of the BC vest as it inflated, thus restricting her attempts to get the precious air she was fighting for. If she had let the air out of her BC and descended only a few feet she probably would have recovered quite quickly—no squeeze, no waves, and plenty of air through the regulator. At the surface one's BC is full of air to keep one's head above water, but when the diver is ready to descend, the BC is deflated and one begins to slowly sink. As the diver descends, the weight of the water above increases the atmospheric pressure exerted upon him. The pressure compresses parts of the body, thus decreasing the amount of water the diver is displacing so that he becomes less and less buoyant at greater depths. With the correct amount of air in their BC, however, divers can adjust their displacement, achieve neutral buoyancy, and experience weightlessness, where one hovers,

neither ascending nor descending. Accomplishing neutral buoyancy is an important skill that makes scuba diving less strenuous and far more enjoyable.

It was the interplay between the vestibular system, ocular sensation, and proprioceptor impulses that contributed to the seasick diver mentioned above. His visual sensations perceived a world held still, while his inner ear sensed extreme movement as he clung to the rapidly bobbing swim step at the stern of the boat. These sensory modalities are always working together to constitute experiences of balance, movement, and bodily placement. These sensory modalities combined into a kind active sensibility of movement and bodily placement is how I am conceptualizing proprioception. Existing studies of proprioception have defined it in many different ways. I prefer the rather straightforward definition offered by Gallagher and Zahavi (2008:143) as a starting point: "Although I do not have observational access to my body in action, I can have non-observational proprioceptive and kinaesthetic awareness of my body in action. Proprioception is the innate and intrinsic position sense that I have with respect to my limbs and overall posture. Its the 'sixth sense' that allows me to know whether my legs are crossed, or not, without looking at them. It is literally innate insofar as the proprioceptive system develops prenatally." Once undersea, however, everything changes. The weightlessness experienced underwater alters the functioning of the vestibular system within the inner ear, profoundly effecting balance, equilibrium, and proprioception. The movement of fluid and small calcium stones, called otoconia, along the ciliated cells within ear canals is reduced or eliminated, thereby effecting the sensory impulses of bodily movement and position to the brain. Muscles in the body loosen and relax because they are not sending nor receiving impulses to

maintain balance as they would when maintaining desired positions in relation to gravitational forces.

Novice divers often find themselves in awkward orientations, tipping side-to-side, or becoming vertical when wanting to stay horizontal, because the reflexive processes that maintain bodily position are functioning differently. They must learn to compensate with other sensory modalities, such as vision, which normally works with the vestibular system, but takes on a more central role in balance, equilibrium, and orientation when underwater. Learning how to use one's BC is an important adaptive skill, along with controlling changes in displacement, i.e. buoyancy, when breathing. The functionality of proprioception is interrelated with the vestibular system, vision, touch, and the normal contingency of gravity, and is therefore significantly altered underwater. The relaxation of the muscles, joints, and skin, where proprioceptive sensory impulses originate, makes it difficult to assess bodily placement without carefully watching the body's movements and making adjustments as one moves. Research shows that divers usually have problems locating parts of the body in relation to each other, as well as the overall position of the body in space, when they close their eyes underwater. And because scuba divers often wear wetsuits, they do not feel the movement of water against much of their skin and therefore have trouble using this sensory mechanism to assist themselves in their adjustments of position.

The skin also cools significantly, changing its sensitivity to touch. Again, vision becomes especially important. Divers have visual indicators that can help them orient themselves. They can see the bubbles leaving their regulators, for example, and know these bubbles always travel upward, and they become accustom to the light above and darkness below. Importantly, coordination related to a complex range of activities, such as those practiced on land, are not

needed for most divers. Most scuba diving is recreational, which means divers are not typically completing tasks needing an unusually developed underwater dexterity. They attempt to swim in streamlined positions, with their arms back at their sides to reduce the "drag" caused by the viscosity of seawater; only novice divers are seen flapping and flailing their arms underwater to adjust their balance and bodily positions. Moreover, recreational divers typically do not touch anything in the underwater environment and follow pre-planned courses, swimming leisurely and deliberately in a horizontal position until they ascend, whereby they come up slowly in a vertical position.

3.2.2 - "The Five Senses," Interoception, and Exteroception

The refraction of light is a process in which light waves change direction as they travel from one medium to another of different densities. It is this process of refraction that makes it difficult for people to see underwater without the assistance of a mask or goggles, which provide the needed layer of air in front of the eyes. For novice scuba divers, judging the size and distance of objects can be very difficult because the equipment used to compensate for refraction generally makes objects appear thirty-three percent larger and up to three-fourths closer. The speed at which sea creatures move, such as the sea lion I referred to above, is perceived as substantially increased because of the greater amount of distance they appear to travel. It is no wonder that the sea lion appeared particularly large and fast to me as a novice diver.

Seawater also effectively absorbs light rays, with only eighteen percent of them reaching below fifty to sixty feet deep. Colors with long wavelengths, such as red and orange, are absorbed and lost first, while colors within the blue spectrum reach further. At depths past thirty

feet, it is very difficult to recognize the color red, and it becomes necessary to distinguish objects more by their relative brightness and darkness as one descends into the second atmosphere and beyond (33ft +). At the bottom of the sea, red lobsters appear to be black. The amount of light underwater, and its reach, is also dramatically altered by *scatter*, as photons are deflected by particulate matter, microscopic organisms, and the small bubbles created by turbid waters. Changes in the weather, the position of the sun in the sky, and cloud cover, all have effects on how much light may penetrate the surface of the sea, and thus effect fluctuations in underwater visibility for divers. As we will see in Chapter Five, evaluating fluctuations in light is a valuable navigational skill for lobster divers when working undersea.

Sound waves travel much faster underwater than they do through air, but their amplitude is severely decreased by the density of the water. Without air as their medium, sound waves are unable to vibrate the drums of the ear to produce the sensation of hearing as one perceives it the top-side environment. There is, however, a lesser known way of sensing sound that involves bone conductivity, and this phenomenon is still functional while underwater, enabling divers to perceive sound. The differences in sound speed, amplitude, and the reliance on bone conductivity creates challenges for most divers, sometimes resulting in disorientation. When sound travels through air, it is usually received by one ear slightly sooner than the other, allowing one to reflexively discern the origins of the sound relative to one's bodily position. Because of the increased speed of sound underwater, however, it is typically perceived as reaching the body uniformly, and this compounded with the decrease in amplitude and the reliance on bone conductivity—which is not nearly as efficient as air conductivity—makes it difficult, or sometimes impossible to accurately assess its originations. Differences in the tonality of a sound,

more than amplitude, effects its ability to travel underwater and be heard by a diver. Thus, sounds of particular tonalities can be heard at great distances, while other tones with greater amplitude and closer proximity, may not be perceived by divers.

The density of water makes it a far more efficient conductive medium than air. Thermal conductivity is twenty-five times greater when underwater, resulting in heat being pulled from the body much more efficiently than normal. A critically important point to remember when scuba diving is that even "warm water locations," such as those temperate waters of the Caribbean, are cooler than one's body temperature, and thus conduct heat from the body. The average summer water temperatures in Atlantic Nicaragua hover around eighty-two degrees, and this feels comfortably warm to nearly all people—even hot to fisherman who work in the sun all day. If one were soaking for hours in this water with little activity, however, it is still possible to succumb to hypothermia. When the average body temperature of 98.6 degrees fahrenheit drops below 95 degrees, a person becomes at risk of hypothermia, a dangerous cooling of the internal temperature of the body that affects homeostasis, causing certain bodily processes and organ functions to alter and eventually shut down. One of the first indicators of a dangerous loss of body heat is the onset of what is usually called "secondary shivers." When divers enter the water, even with a wetsuit, the initial coolness of the water will often cause a slight shivering that quickly passes. If a person shivers uncontrollably for more than a few minutes—such as "Diver Dave" with the chattering teeth whom I introduced above—he is probably suffering from "secondary shivers," his body temperature steadily lowering with the potential for serious medical problems if he does not leave the water and warm himself. Wetsuits are effective in significantly slowing the amount of heat conducted away from the body. A proper fitting wetsuit

is snuggly—though not tightly—sealed at the neck, wrists, and ankles. A small amount of water slowly seeps into the suit where it is warmed by the body and helps prevent large amounts of cold water from entering the suit. This substantially decreases the ability of the colder sea water surrounding the diver to conduct heat from the body. Diver Dave had not zipped-up his wetsuit correctly and thus failed to get a snug seal at the neck. The cold seawater was flowing freely through the suit without being trapped long enough for his body to warm it; so although he had a rather thick, high quality wetsuit, it was rendered practically useless.

The cooling of the skin and use of a wetsuit hinders one's ability to feel the varying force of water contacting the body as one moves, repositions, and propels himself. The density of water and our ability to displace it, and feeling of it being displaced as we move, helps proprioceptive sensory mechanisms in the skin to indicate where limbs are located in space and relative to each other. The contributions of touch to proprioceptive sensitivities is especially important in this environment when considering that gravitationally generated muscle-function, as well as the vestibular system, are no longer contributing to proprioception as they do in normal conditions. The wetsuit obviously creates a barrier between skin and water, but the cooling effects of the water also play a part in hampering normal proprioceptive sensitivities. Cool water has numbing effects on the skin, making it less sensitive to pain and touch more generally. Again, the alteration of normal proprioceptive sensitivities can create disorientation for divers in the way it makes it difficult to coordinate the use of limbs and sense positions of the body while moving. The underwater kinesthetic experience for the novice diver is one where the vary basics of movements and positionings of the body—normally taken-for-granted aspects of one's embodied knowledge—demand committed attention and practice.

Surprisingly, monitoring what you smell and taste while scuba diving is also important. Although one's nose is covered by the mask and the regulator's mouth piece is the only thing touching the tongue, divers do sometimes experience smell and taste. The air one breathes while underwater is compressed into an aluminum or steal tank, traveling through a valve and then a hose to a regulator held in the mouth of the diver, where it enters the human respiratory system as one inhales. If the air compressor fills the tank with "dirty air," or if the tank, valve, hose, or regulator is dirty, the diver will typically taste and/or smell something unusual while diving. If this is the case, the diver should surface immediately and have the equipment checked by a professional technician. Tainted air can, of course, be toxic in normal (surface) atmospheric conditions, but in the high-pressure conditions inherent to underwater scuba diving, the dangers and potential deadliness of dirty air are increased significantly. The compressed air used for scuba diving is typically the same molecular composition as the air we breathe at the surface, but because it is compressed into a scuba tank with a motor, one must make sure that the air is properly filtered as it is filled. On rare occasions, divers suffering from the neurological damage associated with decompression sickness will "taste" something unusual as they are diving. Although this is unusual, experts tend to think this is a result of stress or damage to the neurological processes of the brain by excess nitrogen and/or insufficient amounts of oxygen.

3.2.3 - The Dangers with Changes in Atmospheric Pressure

The relative density of seawater prohibits it's compression at depth, and in this way demonstrates important differences in physical characteristics from those of air. The *pressure* of seawater, however, does increase with depth, primarily because of the force of the water weight

above in combination with the force of the air atmosphere above the surface. This pressure easily compresses air and will even compress denser materials at greater depths. At thirty-three feet underwater, a diver is exposed to two times the surface atmospheric pressure, and enters the "second atmosphere"; at sixty-six feet three times the pressure; and at ninety-nine feet, a diver is exposed to four times the pressure of the surface atmosphere. To illustrate the dangers of these pressure changes, scuba instructors often use "the balloon example." If a balloon is filled with air at the surface and then carried down to thirty-three feet underwater, it will compress to half its size on the surface. With each atmosphere, then, the balloon decreases to half the size it was in the pervious atmosphere. This phenomenon would, of course, continue as one descends further and further and atmospheric pressure increases. These changes in pressure are dangerous for divers for several different reasons. First, air within the diver's body is compressing along with compressible soft tissues. Sometimes air will get trapped as tissues compress—in the inner ear for example—causing a sharp pain if it is not released. Divers usually feel pressure in their ears as they descend and are taught to plug their nose and attempt to blow through it in order to release the building pressure in the ears. Ascent can be even more dangerous. Imagine filling the balloon to its full capacity at one-hundred feet underwater and then ascending four atmospheres to the surface. It would, of course, grow to the point of bursting long before you would reach the surface. Because divers are able to fill their lungs with air at depth, their lungs would experience an analogous effect and incur serious trauma if a diver were to hold his breath while surfacing. The number one rule of scuba diving is "never hold your breath!" The injurious results of this phenomenon are called barotrauma, and it is not limited to the lungs, but can happen in the sinuses and other loci where air might get trapped while expanding during ascent.

Decompression sickness (DCS) is another potential problem arising from the severe changes in atmospheric pressure associated with scuba diving. Although the air we breathe is roughly seventy-eight percent nitrogen, it is not absorbed into the human body upon inspiration under normal surface-level atmospheric conditions. Normally, nitrogen's primary importance for humans is in the way it dilutes oxygen to safe levels for the respiratory system. With the increased atmospheric pressure of deep-water diving, however, nitrogen is compressed to such a degree that bodily tissues will absorb it. Upon ascent the nitrogen absorbed into bodily tissues transitions from compressed solution to rapidly enlarging bubbles that tend to cluster and can thus no longer "out-gas" from the body. If one has spent a great deal of time at extreme depths, bodily tissues may be "saturated" with nitrogen, making a rapid ascent especially dangerous. Slow ascents with occasional stops at various depths will allow the nitrogen time to leave the body and be reduced to safe levels. "Dive tables" have been developed so scuba divers can calculate and determine their nitrogen levels after each dive and safely plan their following dives. These days, most divers trust their dive computers to calculate their nitrogen levels for them, so they may plan how deep and how long their following dives will be. This excess of nitrogen in the body can block blood flow to joints and vital organs, and can do severe damage neurological pathways. The symptoms of DCS vary according to many factors, but usually start with pain in the joints and can progress with dizziness, skin rashes, blurred vision, disrupted internal organ function, paralysis, unconsciousness, and intense chronic pain throughout the body. Especially large bubbles can bring on embolisms, where blood flow to the heart or brain is blocked, usually resulting in death while still at sea. It is important to differentiate the short term symptoms of DCS and the long term effects of the illness. A diver with excess nitrogen in his

system could suffer from decompression sickness, feeling nauseous, dizziness, and pain in the body, and then with the release of the nitrogen, make a full recovery with no residual effects. The damage done to bodily tissues and neurological functioning while suffering from DCS, however, is not always reversible with treatment and is not always able to be repaired by the body itself over time. Paralysis, for example, can be permanent and irreversible. Blocking blood flow to joints and organs can do permanent damage, especially if one dives often without properly decompressing, which can slowly degenerate bodily tissues because of routine disrupted blood/ oxygen supply. From a biomedical perspective, hyperbaric chambers are the only viable method for treating those suffering from DCS. The chamber re-pressurizes the body to the atmospheric pressures experienced at depth, thus re-compressing the nitrogen to safe levels. By decreasing the pressure in the chamber very slowly, the harmful nitrogen is able to "out-gas" from the body. On the Atlantic Coast of Nicaragua, the one functioning hyperbaric chamber is located in Puerto Cabezas, on the far northeast coast. Sadly, most lobster divers are not able to get to this chamber from their remote at-sea locations in time for effective treatment, and many die in transport. Corn Island lobster divers are usually working in waters well over one hundred miles away for the chamber. A trip by panga can take several hours for the suffering diver, depending on the weather and the size of the boat's motor, and assuming that they do not need to stop at the Island first to collect the fuel and money needed for the journey and treatment.

The information above illustrates in *general terms* the physical impact of the undersea environment on the senses and the human body. The scuba equipment described is designed to enable people to safely descend into the depths of the ocean with its proper operation and by executing other accompanying practices that are learned through formal training sessions with

professionals. Along the Atlantic Coast of Nicaragua, not all of the equipment listed above is available, but lobster divers still must contend with the control of buoyancy, equilibrium, movement, body temperature, and breathing, while adjusting the senses to an environment that has extreme effects on nearly every function of the human body. Corn Island lobster divers must contend with the same physical disruptions to the senses as the generalized diver discussed above, but their occupation requires a unique collection of skills, practices, tools, and forms equipment, that shape the ways in which they move, interact, and orient to/with their bodies while hunting for lobster undersea. It is these differences in movement, interaction, and orientation—along with an everyday "Miskitu" kind of embodied knowledge that they bring to their occupation—that underlies the processes of undersea enskillment and thus the way these divers attend to, perceive, and experience the environment and their actions. In the following chapters I progress from discussing the generalized effects of the undersea environment on the immersed body to a fine-grained analysis of specific lobster diver actions, sensory orientations, and embodied attunements, and thus transition from describing the underwater environment as a physical space to treating it as a lived space, embodied by Miskitu men.

3.3 - Discussion

Chapter Five presents a very rare case where the (terrestrial) embodied knowledge one has developed throughout his life, essentially one's way of being-in-the-world, is rendered completely inadequate. Most of what the novice "knows" going in, must be reconstituted through new embodied practices in a space experienced as otherworldly. Even the most seasoned of lobster divers consider themselves visitors in the underwater world—and how could they not,

when considering that their air-source constantly threatens to empty and fail them. Even so, much of this otherworldliness *is* backgrounded for the veterans with undersea enskillment and the development of the tacit "I-can" disposition that inhabits and emerges from one's embodied knowledge. With a stability brought to navigation and perception, the seasoned lobster diver is not only able to body-forth aquatically, but he is also now capable of making sense of his undersea embodied experience within the context of his broader social experience and knowledge as a Miskitu man. To track this process, this research advanced a unique assemblage of methods to demonstrate how the enskilled body comes into being.

3.3.1 -Methods for an Exploration of Enskillment

Considering that there does not appear to be an extensive historically-shared vocabulary among Corn Island lobster divers to refer to the ways in which the senses are performatively elaborated while working underwater, I was left with looking closely at the performances themselves, recording underwater actions, playing them back to divers, and then asking them repeatedly: "how did you do that; why did you do this; what does it feel like when that happens?" The "video playback" method was effective as a means for gaining a more descriptive form of discourse regarding dive practices. Having never been photographed undersea, most divers were intrigued with the prospect of seeing themselves at work. Most of the descriptions surfaced, so to speak, because they were "remembered" upon watching the video record; but there were also those actions that confounded and/or amused divers, primarily because they themselves were not aware that they performed them. Thus, we set out in collaboration to closely examine bodies in action, to break-down the details of how they actively orient to and with the

body in ways advantageous to the task of safely hunting lobster, while simultaneously exploring their fluctuating awareness of different actions.

In the way these analytical procedures started with the immersed interacting person in action, developing an embodied orientation of the senses to attend and attune to the environment in forms advantageous to finding lobster, what we were attempting to uncover is best described as processes of perceptual enskillment (Ingold 2000). Tim Ingold's writings on the process of enskillment aligns with many of the pervasive themes taken-up by (cultural) phenomenologists and enactive theorists presented earlier in this chapter; however, his theory seems especially appropriate because it focuses on an everyday kind of practicality of (inter)action balanced with specific embodied adeptness within different ethnographic contexts to demonstrate perceptual processes. This approach highlights the everydayness of cultivating appropriate orientations that structure perceptual experience, without limiting his analyses to moments of transition or ritual, or starting first with cultural classifications of the senses represented in language and then working towards embodied experience and the social aesthetics of cultural sensibilities. Ingold (2000:5) defines enskillment as "the capabilities of action and perception of the whole organism being (indissolubly mind and body) situated in a richly structured environment." The production of "skills" should not be limited to the notion of transmitting "information" to another or a process of decoding symbols; rather, they are tacit embodied ways of acting and thus ways of perceiving, "neither innate nor acquired, skills are grown, incorporated into the human organism through practice and training in an environment." Following the works of Anderson (2000) and Bateson (1972 [1955]), Ingold's interests are appropriately described as a focus on "sentient ecologies," a kind of developed intuitive knowledge "based in feeling, consisting in skills,

sensitivities and orientations that have developed through long experience of conducting one's life in a particular environment" (2000:25). As developed by Ingold, the notion of enskillment thus fits well with the emphasis on examining the generative processes underlying the non-propositional embodied undersea knowledge of lobster divers presented in subsequent chapters.

Coincidentally, many of the insights contained in Ingold's theory of enskillment emerge from analyses of hunting practices among indigenous groups. Throughout this dissertation I have purposely used the term "hunting" when describing lobster diving practices. I do this to highlight that divers must track and skillfully seek out lobster in this demanding undersea environment. Ingold argues that it is not through the transmission of cultural representations, but through the interacting body that one "learns" how to effectively hunt.

The novice hunter learns by accompanying more experienced hands in the woods. As he goes about, he is instructed in what to look out for, and his attention is drawn to subtle clues that he might otherwise fail to notice: in other words, he is led to develop a sophisticated perceptual awareness of the properties of his surroundings and of the possibilities they afford for action. For example, he leans to register those qualities of surface texture that enable one to tell, merely from touch, how long ago an animal left its imprint in the snow, and how fast it was traveling...

...We could say that he acquires such know-how by observation and imitation, but not, however, in the sense in which these terms are generally employed by enculturation theorists. Observation is no more a matter of having information copied into one's head, than is imitation a matter of mechanically executing the received instructions. Rather, to observe is actively to attend to the movements of others; to imitate is to align that attention to the movement of one's own practical orientation towards the environment.

The fine tuning of perception and action that is going on here is better understood as a process of enskillment than as one of enculturation...For what is involved, as I showed in the last chapter, is not a transmission of representations, as the enculturation model implies, but an education of attention. Indeed, the instructions the novice hunter receives – to watch out for this, attend to that, and so on – only take on meaning in the context of his engagement with the environment.

This passage clearly demonstrates a strong familiarity with the theories of perception presented earlier in this chapter, but also offers something unique in the way it implicitly points to a particular ethnographic methodology to track the associated processes. During my time working with divers, I did not ever witness a novice lobster diver "in-training" with a more experienced lobster diver, where I could witness exactly how a novice's attention is actively directed. Nearly every panga diver worked alone underwater and most said that they were self taught, having learned how to dive and hunt for lobster through trial and error. I did, however, occasionally work with divers who had little experience and—according to their captains—were still refining their skills. In the context of this research, it was ethnographer who attempted to fill the role of a the novice lobster diver—when I was not video recording—both underwater and during post dive conversations and video review sessions. Recording methods entailed the use of several underwater video cameras with the goal capturing both distant observational footage of divers as they hunted and footage recorded from the point of view (POV) of the diver. To accomplish these recordings I operated a handheld underwater video camera while diving with participants. Additionally, I offered participants a dive mask with an integrated video camera, or if the mask-camera did not fit properly, I attached a small POV camera to their tank. For the

mask option, the camera lens was located between the eyes, for the tank-camera option, the camera was located just above the diver's head, pointing forward if he was in a horizontal position. The advantage of the mask-camera was the ability to see exactly where the diver was directing his vision, or at least see where he was pointing the front of his mask. A third POV camera was attached to the boat's center console to record the crew as the diver and I were underwater. The goal was to facilitate an "education of attention," as Ingold (2000) puts it, for myself through habitual interaction in context and by carefully documenting the embodied and discursive articulations of knowledge performed by these divers; the methods served as a vehicle for exploring their undersea perceptions and experiences as emerging from the "sentient ecology" of the interactive body in a rich socio-cultural context.

There is, however, an entirely unique quality to processes of enskillment for Miskitu lobster divers when compared to the hunters sketched in Ingold's passage above. Yes, there is the obvious use of an exotic array of underwater prostheses that must be used to accomplish the work, but this is to be expected, as all hunters must employ their specific forms of equipment to accomplish for their tasks within a local environmental. What is more important than the equipment itself is learning how to use it in an environment that robs you of the most basic of embodied skills you have developed throughout your life. Upon entering the oceanic environment and descending into it's depths, the novice diver experiences an overwhelming form of embodied regression, as much of what the body "knows," no longer fits the environmental context. There is an apparent sensory break-down and attention must be diverted to the most rudimentary of bodily functions and activities. Respiration, locomotion, and controlling one's bodily position immediately become part of a compulsory discipline taken-up by the novice

diver. To compare, it is as if Ingold's terrestrial hunters first needed to learn the most basic requirements of walking, seeing, breathing, and standing still before they could begin to hone their attentional dispositions through the activities of hunting—which then lead to the eventual embodiment of the refined forms of these interactions as skills. A lobster diver must learn how to move before he can maneuver, how to traverse before he can track. Critical to navigating the underwater world is maintaining one's equilibrium, proper buoyancy, and bodily position, and this is accomplished only through the development of unique proprioceptive sensitivities. Proprioception is one's tacit sense of bodily position and location in space, as well as its various parts in relation to each other. The focus on exploring the non-propositional character of embodied know-how lead to a recognition of proprioceptive attunement as an important and often overlooked form of sensory organization. The attunement of proprioception, discussed in Chapters Five and Six, will offer unique insights into the processes of enskillment for these divers and the complexity of movement when working undersea. Entering the depths of a watery world quickly reminds us of our terrestrial origins, as nearly every sensory modality is immediately challenged to adapt.

CHAPTER 4

THE EMBODIMENT OF A WATERY WORLD

Call me Ishmael. Some years ago – never mind how long precisely – having little or no money in my purse, and nothing particular to interest me on shore, I thought I would sail about a little and see the watery part of the world.

(Melville 1851, p. 1)

These famous first lines from Moby Dick are perhaps so well known that they run the risk of being assessed as trite when inserted as an epigraph here. I do indeed have thematic reasons for presenting them, however. By my own assessment, Melville's beautiful prose finds much of its powerful affective-ness in its ability to evoke an imaginative sense of otherworldliness for the reader. As that opening paragraph continues, Ishmael indicates with irony that he experiences an existential grounding by leaving terra firma behind him and entering a watery world of perpetual movement. When life on land becomes motionless and mundane, he feels an uneasy need to head out to sea. It is a mysterious and uncomfortable place for so many of us; yet, even in all its extraordinariness, it is one in which Ishmael has become accustom. Battling giant sea creatures aside, divers from various cultural backgrounds, both novice and expert, will tell you that when it comes to scuba diving, "its like entering another world." The extent to which the undersea environment is given as otherworldly for lobster divers, is the broad guiding theme of this chapter. A second theme, related but more focused than the first, is an exploration of how the initial disorientation and confusion experienced underwater by Miskitu lobster divers is transformed to purposeful navigation and performance. In regard to both of these concerns, the primary aim here is to demonstrate how specific practices and

cultural tools—harnessed as resources to deal with the initial overwhelming disruption in proprioception—(re)organize and enact varieties of sensorial, perceptual, and phenomenal experiences, therein domesticating some of the otherworldliness of the undersea environment by opening it up as an intersubjective space into which one can intentionally *body-forth* and exert agency; this mysterious location is transformed and integrated into lifeworlds brimming with practical concerns and perceived possibilities. What is it that changes for the submerged body and how does one prepare-for, and subsequently adjust and attune to such physically unique environmental demands? How does some of the otherworldliness experienced by divers—that is, the profound changes brought to perception and action—slowly move to the background of one's consciousness through habitual uses of specific tools, movements, and practices that generate new structures of tacit embodied knowledge; thus, allowing a diver to focus his attention on proficiently accomplishing the project of hunting for and killing lobster? If we can track the processes of enskillment for these lobster divers, perhaps then we can gain some insights into how Ishmael grew into his sea legs.

4.1 - Kinesthetic Horizons

The course plotted here aims to move us towards a better understanding of the sensorial and perceptual processes shaping Miskitu undersea experiences; it is a route, however, that stands apart from most ethnographically grounded explorations into the senses, in that it does not necessarily start from, nor prioritize, Miskitu psychocultural conceptions and verbal articulations of their own sensoriums and how they connect experientially to notions of phenomena such as the body, mind, and soul. Rather, this chapter focuses on a close examination of the dive

practices themselves and proposes that the how of lobster diving—that is, the actual sensorimotor coordination of the body as shaped by social and cultural resources—will contribute significantly to our understanding of why particular dive practices and embodied experiences come into being and persist. To this issue, I am reminded of a statement by Robert Desjarlais in his book Sensory Biographies, where he writes, "You cannot readily tap into the 'lived experience' of cultural subjects, be they in Boston or Calcutta. You can only talk with and live among them. So words, really, are the stuff of meaning and evidence here, along with other manifest actions—a look here, a gesture there" (2003:6, italics added). The tenants of my own theoretical premises tend to align with Desjarlais's observations on this topic, especially when considering his elaborations in the same paragraph, "As I see it, the phenomenal and the discursive, life as lived and life as talked about, are like the intertwining strands of a braided rope, each complexly involved in the other, in time" (6). Agreed, if by this he means the two separate strands collaborate to make a whole in the research endeavor; but in the experiential realm of being-in-the-world they are indeed mutually constitutive of each other and are sometimes difficult to parse in the way they both serve the generative processes constituting the self. "The phenomenal and the discursive" are not inherently discrete; it is the researcher who first parses them from the whole of a sentient ecology and then "braids" or "weaves" them back together. Only things treated as separate entities can be braided or woven, life as lived is an example of these phenomena synthesized and integrated as human action built collaboratively in real-time. It seems that "manifest actions" take a backseat to discourse in the sentence above, whereas in this research they take the helm. There is also, however, a certain taken-for-grantedness involved in this sort of approach that

stems from a facet of the human condition considered so normative that we typically do not question it.

In our ambitions to explore the interconnections between socio-cultural processes and sensorial-perceptual processes, we as ethnographers find ourselves seeking to uncover the patterns of practices and representations within group settings where most of the individuals we interrogate and observe habitually experience a somewhat normative existential groundedness, be it formulated theoretically as a cogito or what semioticians call an origo or indexical center point; either way, it is a "self" functionally situated in time and space with the ability to bodyforth into the world to socially transform it's "things" into "for-me" objects that can be interacted with, identified, referred to, and discussed with researchers (see Gadamer 1996; Heidegger 1962n [1927]; Hanks 1990). Yes, this seems an obvious point to make, but this existential groundedness and the corresponding tacit awareness of an embodied situation in time and space is exactly what is challenged and at stake for the novice Miskitu lobster diver when he enters the sea and attempts to descend into its depths and hunt lobster. The initial undersea disorientation is largely attributable to severe disruptions in proprioceptive sensory modalities, resulting in highly ineffectual assessments of movement, location, and placements of body parts relative to each other. The novice diver flails in his attempts to find and control himself in an underwater environment where he must learn anew how to contend with breathing, balance, buoyancy, and weightlessness, all at once. He loses his *groundedness*, and with his feet literally no longer firmly planted, he is denied the (pre)objective (sub)stratum needed to body-forth into the environment he wishes to perceptually navigate. The lived-world and its things in that moment of disruption are no longer "given" and seamlessly embodied and attenuated in a ready-to-hand Heideggerian

sense, but must be worked for and *reincorporated* (see also Husserl 1962 [1913]; Merleau-Ponty 1962). The needed stabilization can only be attained by generating specific skills involving distinct forms of movement and types of equipment, so he can—and again, I mean this quite literally—"gear-into" and extend sensorially into the environment, so that it may become skillfully sedimented into his embodiment as tacit knowledge (Merleau-Ponty 1962).

Moving back to Desjarlais's quote, I do not mean to argue here that Miskitu men do not bring culturally derived conceptualizations and tacit embodied knowledge to their diving techniques and experiences, but what the untrained novice lobster diver does bring to the activity is rendered mostly inadequate and misleading in those first days of learning how to adapt to the unique underwater environment. In fact, just about everything one "knows" and expects out of one's body and its kinesthetic wisdom is challenged in this environment and must be recalibrated. Thus the data presented in this chapter provides us a unique glimpse into a sensorialperceptual-experiential ontology, whereby proprioceptive sensitivities, and thus perceptual preobjective structures of embodiment, must be re-configured through intersubjective sensorimotor activities—as afforded by cultural artifacts—to produce an effective lobster hunter. The impending analysis here is thus unique in that it does not present much Miskitu discourse on this matter of refining skills. In Chapter Six, however, analyses of underwater experience continues with presentations of discourse as provided by the divers themselves, including articulations of illness experience while at sea and undersea.

Formulating and presenting anthropological theories and arguments is analogous to hunting lobster in the way that clearly identifying the locations of processes and salient phenomena is key. Here we find process in socio-culturally mediated "forms of doing,"

specifically in the way these divers master two distinctive embodied techniques, the "headfirst descent" and "buoyancy control breathing"; but unlike mastering "techniques of the body," as presented in previous studies, these "techniques" must be mastered in the alien conditions of a whole new world that is first encountered as collapsing in upon the experiencing actor (Mauss 1968). Moreover, the "techniques," are really "skillfull" ways of (re)encountering the everyday world (de Certeau 1984), and are not typically "taught" through expert instruction on the Caribbean Coast. Ingold offers a vivid response to studies of the disembodied mind when he defines skill as "...a property not of the individual human body as a biophysical entity, a thingin-itself, but of the total field of relations constituted by the presence of the organism-person, indissolubly body and mind, in a richly structured environment" (2000:353). Scuba diving usually begins with some underwater "thrashing" of the body because one is positioned in a space that demands sensorimotor re-calibrations and re-patternings, and thus a re-shaping of the embodied-mind and how it senses, perceives, navigates, and experiences the world. It is the experience of a world closing in upon us, collapsing inward—that we are normally able to habitually extend into sensorially to the point of its bodily effacement—that is typically the source of undersea panic and fear. The proprioceptive impact of developing these skills and the ways in which they shape subsequent modes of sensing, perceiving, and reasoning while hunting lobster is the focus of this chapter.

4.1.1 - The Collapse of Lived Space

Throughout this dissertation there is a focus on an ecological conceptualization of mind as shaped by, and fundamentally inseparable from, one's embodied movement within a richly

structured social and material environment (cf. Bateson 1972 [1955]; Goodwin 1994; Gibson 1979; Ingold 2000). Our enskilled sensory attunements entail sensorimotor engagements, wherein the interface between body and thing becomes effaced as the body extends sensorily through the sociality and materiality of a cultural environment to the extent that the lived-world becomes one that is embodied within individuals, essentially shaping ways of perceiving, navigating, and being in the world (Heidegger 1962 [1927]; Merleau-Ponty 1962). Following this line of reasoning, then, we can presume not only that disparate forms of engagement shape disparate ways of perceiving, but that a breakdown in modalities of engagement would limit, perhaps even foreclose, the ability to extend into and embody the lived-world. This sense of sensory foreclosure and perceptual confusion is what novice divers experience when they enter the undersea environment in their early days of self-training. Take, for example, the description below, where a veteran lobster diver explained to me how difficult is was to orient himself and his sensorium in his early days of lobster diving.

I was movin my arms and legs like crazy crazy, and I couldn't get under the water. I was floatin, I kept on floatin to the top. I would get a little under and, and, then my body would start goin in the wrong way and then when I try to make it, when I try to go, I would loose where I am, I didn't know where to go up and down. When you start takin too much breaths you can't get under. Sometimes you get under but the water is movin you and takin you, and you don't know were to go because you can't see anything.

Those first days as a novice Corn Island lobster diver are often experienced as disorienting and unnerving. Most of one's tacit embodied knowledge, as shaped in a terrestrial

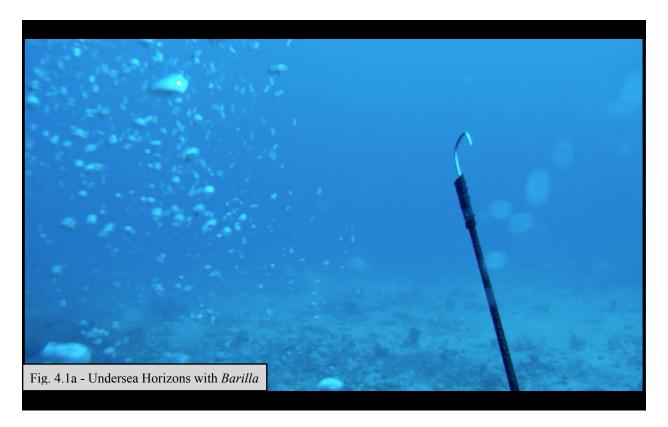
socio-cultural lifeworld, is put to the test and fails in the aquatic environment. The diver quoted above was having problems with the buoyancy of his body, proprioception in the way he could not assess his bodily positions and limb placements, and with the ability to sense ("see") the relevant phenomena surrounding him. Novice lobster divers have difficulty getting below the surface because they increase their positive buoyancy by taking deep breaths, expanding their diaphragms, and displacing water to the point that it takes much more effort to descend. Of course, the effort exerted in failing to descend only makes one breathe more intensely, thus making him more buoyant and progressively less likely to have success descending. The battle against buoyancy is accompanied by a failure to maintain balance and smooth coordinated movement. He does not have access to the kind of scuba equipment that is typically used to "trim" balance, and he does not yet know how to use the momentum of the moving body to his advantage. The novice lobster diver kicks sporadically and flaps with his arms to adjust his alignment, while attempting to evaluate his bodily whereabouts and simultaneously descend. As discussed in Chapter Three, sensations associated with touch, the vestibular system, and proprioceptors within muscles and joints, all have their functionalities severely disrupted. These divers often inadvertently tip side-to-side, find their bodies wrong-end-up, and frequently kick themselves—one leg kicking the other—as they attempt to reposition themselves. Equipment can become rearranged, tangled, and knocked out of place in the process. For the novice, this is an experience of immersion in another world where unknown rules apply.

Bodily immersion in the ocean is perceived as absoluteness, and in this way becomes an important phenomenon contributing to experiences of otherworldliness for novice lobster divers when undersea. While diving, the water touches equally on all sides of the body at all times; it is

impossible to separate oneself from its contact and capacity to envelope. We cannot push it away from us when we are in it, though we can feel its movements in relation to our own. The density of the water and the effort is takes to displace it, to move through it, evokes a sense of *entry*, of *being inside* something other, and this fundamental condition continually solicits the attention of the beginner lobster diver. If terrestrial life is the unmarked habitual norm, and what is above and beyond the earth's atmosphere is "outer space," then what is experienced underwater can aptly be described as an entry into "inner-space," a space wherein one can indeed feel captured; experienced not merely as another place, but as a spatial phenomenon *entered into* that is entirely alien. The unique character of this inner-space, where one can no longer take routine movement and breathing for granted, is understood primordially as humanly uninhabitable; thus, those creatures that do inhabit this space take-on a distinctively distant kind of otherness (such as the sea lion encountered in Chapter Three); in fact, the whole ecology takes on a distinctively distant, and ultimately distractive, kind of otherness for the novice.

Once a struggling novice lobster diver makes it below the surface, he perceives no clear line of horizon in front of him, only an increasing haziness and blur in the distance, objects becoming increasingly indistinct until they transition to only shadows and then disappear (see Fig. 4.1a). Unlike the seasoned lobster diver, he does not know which direction is the most appropriate to explore because he cannot determine which silhouettes in the distance might be oceanic features significant to the task at hand. From the novice's perspective, these phenomena in the distance—*if* they are perceived at all—appear as one dimensional profiles, not as recognizable three dimensional objects that correspond with my immediate plans. Moreover, those shadows in the distance reside in an uncertain "beyond" from where I am positioned. I do

not know exactly how far away they are in relation to my stamina, my swimming skills, the amount of air left in my tank, and the possibility that they will be productive lobster habitats? This space is still abstract and alien to me, it is not yet a lived space, configured to my



capabilities and intensional project. Those objects directly in front of me, a large rock, for example, can be identified and explored, but the surrounding ecology is mostly opaque, and choices of navigation difficult to make. When lobster divers participated in video review sessions with me and I asked about how they first learned how to navigate the undersea terrain, their responses always explained a process of trial and error. Those first days of navigation, however, were described as entirely confusing, with decisions of directions traveled being somewhat random.

The novice lobster diver has no doubt heard of "flower rocks" and "banks" and "lobster holes," perhaps he has even heard vivid descriptions of these habitats, but he has not experienced

an embodied engagement with "the things themselves," as immediately present sensorially and perceptually through a specific array of sensorimotor skills, and so he really can not perceive them for what they are to the seasoned Miskitu lobster diver (see Husserl 1962 [1913], 1964; Noë 2012); these phenomena are recognized in the far distance by veteran divers, but the novice perceives only shadows, not a horizon of possibilities. The modern definition of *horizon* aligns closely with term's original meaning in Greek, as a line of separation or division, and the accompanying notion that something different resides on each side of that line, above, below, and beyond it. A horizon often evokes an imagining of a break from overwhelming continuity in the way it signifies contrast and possibilities (cf. Crapanzano 2004; Mattingly 1998, 2000). It is not that a horizon is obscured undersea, the space is wide open, but the novice's sensorium and embodied skills have been rendered inadequate for the environment and he perceives mostly a constricting and formidable uniformity. The opacity of the sea and its relative compromise of perceptual lucidity, evokes a sense of oceanic endlessness without recognizable horizons for action, the experience of immersion within a space without distinct boundaries, where things can quickly appear and disappear, seemingly at random (again, the sea lion experience serves as a good example here). At lesser depths, the surface is a kind of clear-cut horizon, but even the surface transitions to a vague steady glow above when at greater depths. This disruption in sensory experience can bring on feelings of *compression and exposure* within a vast openness. The term "compression" here, is another term offered in recognition of the collapse of the physical and the figurative in my descriptions of the phenomenal experience of undersea immersion (see Gibbs Jr. 2006; Lakoff and Johnson 1980). The body is being physically compressed by the weight of the water as a diver descends, while the experience of not being

able to body-forth into the world as one can do terrestrially, shapes an experience of shrinkage and foreclosure. As one lobster diver told me, "I felt like I couldn't move, like I was trapped in this big place." Paradoxically, this vast openness can be experienced not as opening up for the novice lobster diver, but as closing in, as he is not able to sensorially extend himself into it as he can when the earth is beneath his feet.

4.1.2 - Prostheses and Proprioception

So how do lobster divers form an intimacy with something so alien? How do they bodyforth and extend themselves into a space that can so easily close-in on them? The answer lies in the way divers learn to skillfully engage with, orient to, and attend to this environment, and themselves, in such a way that the "otherworldliness" described above is backgrounded in one's consciousness while hunting lobster. To do this, one must master an array of skills to a degree that they become embodied knowledge, the skills not needing one's focused attention to practice them. If a lobster diver was continuously focusing attention on breathing, buoyancy, bodily orientation, etc., he would hardly have time to attend to the subtle signs indicating the locations of lobster; nor would he be able to harness the dexterity and smooth coordination needed to "hook" a lobster—without spooking other lobsters into hiding—if he was attempting to attend to each embodied movement and sensory modality utilized for the operation. To embody the skills needed to move through this space effectively and hunt lobster, one must learn how to adopt specific prostheses while attuning one's proprioceptive sensibilities to these tools. It is through a process of enskillment, focused on the use of prostheses and proprioceptive attunements, that a

lobster diver's body comes to extend particular perceptual capacities and open-out into the environment so that he may come to embody the aquatic world and accomplish his project.

The essential tools for a Corn Island lobster diver—including, of course, the panga and its crew—are comprised of a mask, fins, regulator, air tank, backstrap, and a *barilla*. The backstrap



is a one inch thick, slightly concave, pear shaped piece of molded plastic that has a strap used as a belt in front, and a second strap for the tank on the back (see Fig. 4.1b). The

barilla is three foot long piece of rebar—though preferences in length vary—of approximately one quarter inch diameter (see Fig. 4.1a). One end is sharpened to a point so it may be used to stab and kill captured lobster, while the other end has a hook attached to snare lobster. The scuba equipment used are comparable to the standard scuba equipment presented in Chapter Three, though they are usually in dilapidated condition. The different pieces of scuba gear serve as prostheses in the way they extend bodily capacities and allow the diver to effectively navigate the underwater environment and hunt for lobster. Without the prostheses, he would not be able to breathe, move effectively, or see clearly, and would not be able to hunt lobster. Like all prostheses, they are not in-and-of-themselves necessities, but are designed in recognition of the shape, navigations, and expectations of "normal" bodies in a socioculturally shaped world,

wherein motivations, goals, and labors are compatible with local socio-political, economic, and moral sensibilities (Jain 1999). Thus, diver's tools can be understood as prostheses in two ways: they permit him to enter into and navigate an extraordinary oceanic space that his body cannot physically adapt to without technological assistance; and two, the tools enable him to engage in an activity, demanding a particular form, and providing a valued outcome, that reflects personal and collective socio-economic patterns. "Scuba" is an acronym for "self contained underwater breathing apparatus," but Jacques-Yves Cousteau and Emile Gagnan, the inventors of the first open-circuit scuba system, simply called it the "Aqualung" in recognition of its prothetic qualities. Scuba prostheses allow basic access to an important socio-economic space of the world. This space is socio-culturally shaped in the way it is continually accessed as the place for the most fundamental economic activities in the region. Scuba equipment thereby allows Miskitu men access to the most valued commodity on the Caribbean Coast of Nicaragua, lobster! When a prothesis performs as expected, over time it becomes a transparent extension of the body and self in one's navigation of a local world (see Kurzman 2001). It is experienced not as an artificial addition to the body, but as part of the body and self that extends my sensorium into the environment and shapes the way I interact with it and understand it. In this section we are tracking two interlinked processes, then, the process of these prostheses being incorporated into the body and self, and the extension of the body into the environment as a course towards an embodiment of that environment.

4.1.3 - The Headfirst Descent and Buoyancy Control Breathing

The headfirst descent is a practice unique to Miskitu scuba divers, emerging as a way to stabilize the disorientation brought about by the undersea environment and the lack of scuba equipment available to them. To reiterate, the practice is not explicitly "taught" to these divers. In fact, Miskitu divers receive no formal training and typically learn by trial and error after gaining a rough idea of these practices by passively observing fellow divers or by hearing about them. In preparation for a dive, captains and divers search through their dive-logs to asses what locations might be advantageous in consideration of the weather, time of year, evidence of lobster migrations, undersea features, and most importantly, how the diver feels that day (does he feel able to dive an especially deep habitat, for example). Dive-log entries record dive locations by longitude and latitude, and often make note of the date, time of day, weather, undersea features, and amounts of lobster caught. Captains are able to re-visit these sites using hand-held GPS-s that determine one's current longitude and latitude and then calculate the most efficient route to a waypoint (dive site). These GPS-s do not display maps or topographic representations of the ocean floor—they provide only coordinates and routes relative to the geographic cardinal directions. Despite the importance of recording and re-visiting dive sites—some can be very productive over several years—we should not think of these sites as the single objective during a dive. Recorded dive sites are used as starting points, and many times they are not even found because of environmental changes or imprecise navigations on the part of the captain or diver. The recorded dive site is a minuscule location relative to surrounding lobster habitats, and these habitats can support great variations. Every dive for lobster is primarily exploratory, where a diver must enact his unique array of embodied skills to find the lobster. It is the recorded dive

sites in relation to each other that offer the most insightful information, because it is possible to identify larger processes regarding the lobster migrations and the health of habitats by comparing them over time. The log-book kept by captions and CI lobster divers remind us of the ways in which cognitive processes involved in lobster diving in this context reach far beyond the private minds of CI lobster divers, but are indeed better understood as emergent public processes distributed not only across the immediate crew of the panga, but also stretching back to the interactions of crews and divers-past who have been recorded in the dive-logs (cf. Hutchins 1995; Rogoff 1990; Vygotsky 1978). The sociality of cognition becomes historically sedimented in the dive-logs and the technologies harnessed by the CI diver (see Chapter Three), and then becomes relevant in the present in the way the crew attends to them to build courses of action for the task at hand. In the words of Charles Goodwin, "participants build and contest **professional**



vision, socially organized ways of seeing and understanding events that are answerable to the distinctive interests of a particular social group" (1994:606, bold original). Once the diver and crew have agreed on the

region where they will hunt lobster for the day, the captain motors to a particular site within that region and the diver prepares for his first descent of the day.

Sitting on the transom of the panga, the diver prepares to descend into the sea. He slips on his first, leans over the rail and rinses his mask with seawater to assure it is clean, and then grabs his *barilla* in his left hand as he positions his legs to hang over the side of the panga.

At this point he has already evaluated how far and in which direction the panga has drifted since stoping directly over the chosen dive location. The captain will sometimes point in the direction







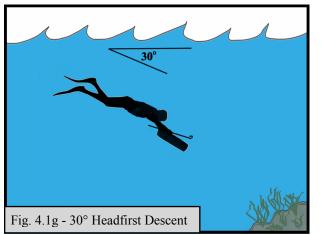
of the lobster habitat to assist the diver in his evaluation of direction. It is also possible that the captain has identified the habitat as a certain kind: a rock, hole, or bank, for example. The air tank is resting on the panga rail next to the diver, being held up by the bubble-man. The diver pulls his mask over his face and with his right hand grabs the handle on the backstrap already attached to the tank. As the diver pushes himself off of the aft rail and falls into the water, the bubble-man drops the tank into the water (see Figs. 4.1c, 4.1d, 4.1e). Taking advantage of the momentum of his body and tank falling into the water, the diver counterintuitively exhales as he drops into the water, quickly raises his knees towards his stomach, and

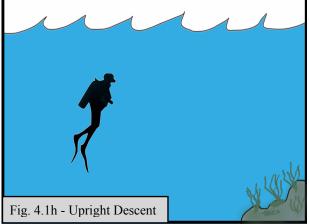
then rotates his tucked body forward so he may be propelled head first further beneath the surface. The diver can then extend his legs and begin smoothy finning (kicking) to start a 30°

headfirst descent with his tank held out in front of him (see Fig. 4.1f). At roughly ten feet under surface he turns in the direction of the previously identified lobster habitat (if one was identified), and places the regulator in his mouth so he can breathe. The turn is accomplished by rotating and flexing one's wrist as a way of redirecting the tank extended out in front, and by adjusting one's finning to follow the tank. It is important to take shallow breaths during the start of the descent to minimize one's buoyancy and the possibility of being pushed to the surface. As the novice continually repeats and slowly perfects this skill he learns that the amount of air in his lungs profoundly effects the buoyancy and positioning of his body. He learns that controlling respiration assists in gaining control of the body, and this becomes a valuable skill that will be critical to hunting lobster on the ocean floor. He also acquires a knowledge of how momentum and propulsion will aid his ability to maneuver, but realizes that he must first make it far enough below the surface for proper finning technique to be effective. Done correctly, this entry technique takes very little effort and streamlines the body so it may travel through the sea with much less resistance—which means less effort needed for the diver. Sloppy or failed attempts of this technique will leave a diver either struggling to reposition himself, or flailing and possibly floating to the surface. More importantly, poor technique means one is unfortunately focusing his attention on his own experience of proprioception rather than lobster habitats.

This kind of headfirst descend is not practiced by cert-divers, but is necessary and advantageous for Corn Island lobster divers, who have a specific assortment of equipment available to them. Lobster divers generally do not have the option of weighting themselves with lead to counter the positive buoyancy of their bodies and their equipment, and therefore would not sink below the surface, if they were to remain in the vertical descent position as cert-divers

do (see Figs. 4.1g, 4.1h). While weighting themselves would help in making a slow and easy vertical descent 90° to the surface, the extra weight would work against the requirements and goals of their line of work, increasing "drag," slowing their mobility considerably, and





demanding much more physical effort while traversing the bottom of the sea. Moreover, lobster divers do not use BCs, so they would not be able to counter the extreme negative buoyancy while at the bottom—i.e., they would have to resist sinking at all times, if weighted. More than anything else, this technique is about gaining control of the body, so it may be oriented in ways advantageous to finding lobster. The availability of equipment has perhaps made it necessary to descend this way, but as we will see, it also positions the body advantageously, and is the first step in a sensory attunement and a structuring of attention that will allow the oceanic world to open-up perceptually, so a diver may body-forth and hunt lobster effectively.

4.2 - Incorporating the Undersea World Into the Lifeworld

In Chapter Three, I described in general terms how different sensory modalities physiologically contribute to proprioceptive processes. Specifically, I mentioned the ways in which our sense of touch, vision, the vestibular system, and proprioceptors in muscles and joints

worked in coordination to maintain equilibrium, and shape our sense of balance, bodily position, and locations and movements of limbs in relation to each other. It is these modalities working together to shape a more inclusive tacit experience of having control over one's body and knowing its locations and re-positionings in space that I am defining as "proprioception." So far in this chapter, I have outlined the ways in which proprioception is disrupted undersea, how it leads to radical disorientations, and then argued that the headfirst descent and buoyancy control breathing are practices leading to a skillful recalibration and attunement of the senses. Ultimately, this section demonstrates that proprioception is not a universal sensibility fashioned by distinctively separate sensory modalities with predetermined functions, but is in fact the result of re-orientations of the body through cultural tools, social interaction, and practiced movements. The weightlessness experienced underwater renders the vestibular system in the inner ear largely dysfunctional. In short, this results in muscles not receiving impulses to keep one's balance relative to gravitational forces, and so the muscles relax, as do the proprioceptors within them. Thus, the automatic sensory mechanisms dedicated to maintaining one's balance and sense of bodily position become inactive, so to speak, and to a degree, so do those sensory impulses dedicated to monitoring movement. I have already described the problem divers have with balance when undersea and have argued that the headfirst descent and buoyancy control breathing are the first steps in regaining a sense of body positionings. Below I track in finer detail how this happens.

4.2.1 - Sensory Attunement and the Variegations of the Undersea World

The headfirst descent produces a particular visual field available to divers that can be used effectively to re-calibrate balance and overall position of body despite the vestibular disruptions. Because the headfirst descent puts divers at a 30° angle from the surface, they are able to simultaneously see a horizontal surface above them and the horizontal plain of the ocean floor below them. The seasoned lobster diver can use these features as indicators of the horizontal and vertical stabilization of his own body relative to them. This way of visually attending to phenomena to maintain balance begins with reasoned evaluations and explicit focus, but the process slowly becomes a continuous monitoring that is backgrounded in continuousness —the eyes skillfully moving without reflecting on the action so that balance and stabilization of one's body is always tacitly evaluated and adjusted-for while diving. Lobster divers initially direct their attentional focus to these horizontal planes of the ocean's surface and floor because it helps in evaluating the depth of the dive site. Contending with depth is, of course, one of the most dangerous aspects of the job, and any person diving further than fifteen feet will most likely begin to feel a pain in their ears and be reminded that they must adapt to the atmospheric pressure changes. A second visual phenomenon that contributes in monitoring the stability of the body are the bubbles released from one's regulator, which typically ascend vertically to the surface (CI divers move so quickly that bubbles sometimes travel behind them before they ascend). Again, the veteran lobster diver need not reflectively focus visual attention on these bubbles, but he is always tacitly aware of them and can determine the direction to the surface in relation to his position. The embodiment of this visual sensibility—based on particular sensorimotor patterns of the eyes put to work, and emerging from broader movements and

positions of the body—works to reorganize sensory modalities for the disrupted vestibular system. The headfirst descent thus enables these horizons of the surface and ocean floor to become simultaneously *present*, and although this presence becomes peripheral and backgrounded in consciousness to allow attention to be focused on lobster hunting, it is still an aspect of the generated *perceptual field* and is actively contributing to subsequent embodied actions, as well as conscious decisions and a more inclusive sentient experience of the undersea space. The newly developed reliance on vision can be easily proven by simply closing the eyes while undersea and experiencing complete disorientation.

A second set of skills developed to sustain balance and bodily position, involves the refinement of buoyancy control breathing, which, like the re-patterning of visual perception, takes on a certain form of development through the skillful execution of the headfirst descent. As stated in an earlier section, expanding the lungs with air can hinder descent for these divers, so they quickly learn that exhaling and taking shorter inhalations is required. Lobster divers thus become keenly aware that certain forms of breathing can assist in controlling the buoyancy, balance, and position of their bodies. The 30° angle inherent to the headfirst descent is advantageous to performing certain kinds of changes in bodily position in relation to buoyancy control breathing. From 30° angle of descent, tilting vertically upwards and downwards to make adjustments in bodily position can be made efficiently with deep inhalations that will raise the heavier upper body, or expirations that will direct the upper body downward and increase the angle of descent. These kinds of pivots and changes in bodily positions take much more effort in the vertical descent position practiced by most cert-divers. With efficient buoyancy control breathing, lobster divers can easily pivot upwards to surface or level-off at a certain depth, or can

increase their angle of descent, if they see relevant phenomena directly below them. That this is accomplished with less effort than it would be in other bodily positions is important here because physical exertion in maneuvering, directly corresponds with the rate of air usage, and the amount of time it takes to deplete one's air corresponds with the duration one has to find a sufficient amount of lobster. Much like the attunements shaping visual perception, careful regulation of breathing begins with focused effort and directed attention, but the practice slowly becomes enskilled to an extent that a diver is always tacitly aware of the ways in which he is expanding his diaphragm, and its effects on buoyancy and bodily position, without having to "think" about it.

A third method for lobster divers to regain control of their balance and bodily position is through forms of movement and muscle activity associated with the headfirst descent. The intensity of this activity works to stimulate sensory impulses in muscle, joints, and the skin.

Divers effectively take advantage of the momentum of their bodies falling into the water during the headfirst descent and begin finning appropriately to perpetuate that momentum for the duration of their descent. Those proprioceptors residing in muscle spindles not being activated by the vestibular system are thus put to work and stimulated, as muscles and joints stretch and strain while generating a steady and powerful propulsion. This activity, along with the stimulation of one's sense of touch, assists in assessing the locations of limbs in relation to each other. For scuba divers in general, one's sense of touch is usually dramatically altered while underwater. The most obvious reason for this is associated with the skin being covered by neoprene wetsuits that are several millimeters thick; but the skin also cools, which numbs sensitivity, and most scuba cert-divers practice very slow forms of movement so they experience only a subtle

resistance of the water surrounding them. Miskitu lobster divers, by contrast, move quickly through the water with rapid powerful finning techniques. They have much less gear weighing them down and creating drag, and do not wear wetsuits. A CI lobster diver can feel himself moving through the viscosity of the water, his muscles exerting effort, the water moving over his skin, and stimulating his sense of touch. This combination of muscle and skin sensitivity adds significantly to a diver's proprioceptive sense of the body's position in space and the locations of bodily parts in relation to each other.

A key point here is not that proprioception—as an innate and objective physical process —is not working properly and therefore divers must compensate with other distinct sensory modalities. Rather, what is demonstrated here is that "sensory modalities" always function within a complex sentient ecology and in relation to each other to the extent that they really should not be considered autonomous at all. Their interrelated workings depend on the moving body within particular sociocultural and material environments, where tools and forms of practice shape the ways in which we attune them and attend to their functionings. Phenomena become differentially present for people, because their sensoriums are differentially patterned and experienced through processes of enskillment. Proprioception is not simply lost and then compensated for, but is rather ecologically re-attuned to a new environment through embodied skills to accomplish culturally relevant courses of action. When this re-attunement becomes sedimented as embodied knowledge, and the diver looses the ability to reflect on exactly how it is he accomplishes the fine details of his undersea activities, his undersea sensorium feeds into a pre-objective substratum of experience. Now that we have established how it is he regains bodily stabilization with attunements of vision, buoyancy control breathing, touch, and muscle control, we can

explore further how he comes to body-forth into the environment, perceive its features, and come to know it as a particular configuration of time and space perceived and made relevant to his goals.

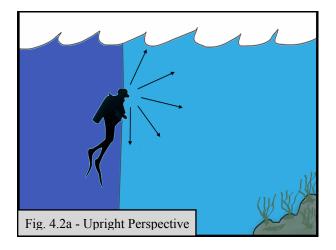
4.2.2 - To Body-Forth Undersea

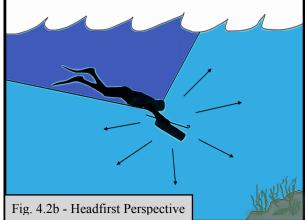
Moving back to the 30° headfirst descent, I want to explore further the sensory impact of the tank being held out in front of the diver. First, it streamlines the diver, decreasing the amount of effort needed to reach an advantageous speed during descent. It also enables an ease in maneuvering the body, as the diver can direct the tank with slight movements of his arm and/or wrist, and then draft behind it. More important than its use as a tool in-itself, however, is the way the diver extends his sensorium through the extended tank and into the environment. Much like Bateson's and Merleau-Ponty's example of the blind man's cane, the tank that the diver holds out in front of himself during descent transforms from just another object into a sensorial extension of the body, as does his fins and the other prostheses that he harnesses to navigate undersea. Following Bateson, we should be compelled to ask where a diver's sensorium and perceptions reside, inside the head, in the body, where the hand interfaces with the tank, at the end of the tank as it extends into the environment, or beyond, into the viscosity of the water. In the way the unsecured tank is extended and held away from the body, it is particularly susceptible to movement by undersea currents. Like the blind man's cane, the tank sweeps across the environment in connection with the diver's movements and becomes a conduit for the body's extension into that environment. The extended tank provides the first indicators of the direction and strength of undersea currents as he is descending, and he makes evaluations and plans

accordingly, usually attempting to use the current to his maneuvering advantage. The undersea current is relevant in the way it effects the temperature of the water, but also in how it impacts the amount of effort it will take to maneuver, especially at dangerous depths. Evaluations of currents are thus understood in relation to navigation plans and stamina, but also in terms of the depth of navigation—depth being gauged visually during descent, but also by how difficult it is to expand one's diaphragm when breathing near the bottom. With increased depth comes increased pressure, and it is felt first in the lungs after one's ears are cleared. So what is sensed through the extended tank, shapes a series of evaluations and a form of thinking about the state of the working body, the environmental conditions, and plans for navigation. Thus we find cognition as structured within unfolding action, whereby embodied practices and prostheses facilitate the body's sensorial extension into the environment as a course towards perceiving relevant phenomena (see Goodwin 1994; Hutchins 1995).

Following this line of inquiry regarding the ways in which lobster divers plan their navigations, we can delve even further into the importance of the headfirst descent in configuring the spatial and temporal characteristics of the underwater world. A distinctive visual field is opened up by the position of the body in the headfirst descent. At the 30° angle, the diver has a view of the ocean floor in every direction, whereas a vertical descent results in the body blocking everything behind the diver (see Figs. 4.2a, 4.2b). The seasoned lobster diver scans the ocean floor in all directions as he descends and what he perceives is more than just a scattering of independent objects. What he sees is a topographic pattern of oceanic features that are identified by attending to the variations of light being reflected off of the ocean floor. Video data recorded from a POV mask-cam I provided for a diver, successfully demonstrated how this visual

perspective facilitates the decision making processes of navigation. In the video we noticed that the diver looks down, then turns his mask to the right, and then abruptly makes a right turn.





When I asked him why he had turned to the right, his reply, not surprisingly was, "because the bank is over there." When I said that I could not see it, at least not at the moment when he made the turn, he assured me that it was visible and was indeed the reason why he had turned. With further analysis we were able to deconstruct what he was attending to visually to better discern his way of "seeing."

When he looked down he noticed that the ocean floor was sloped, and so his eyes followed the incline of the slope to a horizon that was especially dark in color. In front him, to his left, as well as behind him, the water was a much lighter shade of blue, produced by the reflection of light off of a white sandy bottom. With the sand there is no bank, and most likely no lobster. When the diver turned to his right, he could see more clearly that there was a linear continuity in the pattern of the darker horizon, and this, along with the slope of the ocean floor, assured him that this horizon was indeed a bank in the distance and not a solitary outcropping of rock. Based on the perception of these features, he decided that he should navigate towards the darker horizon in search of lobster. The way that lobster divers attend to the patterns and

fluctuations of light and the color of water while undersea, is reminiscent of the way that an artist —at least some artists—attend to visual phenomena when creating a painting. I have heard painters say that what they are putting on the canvas is imagined not so much as a distinct object in-itself to be re-presented, but is rather imagined and visually attended-to as patterns of different shadings, contrasts of colors, and distributions of light, that when put together create a recognizable image-in-context. I believe this is what it is like for the seasoned lobster diver. He does not *only* look for clearly demarcated objects, but also attends to arrangements of light and color that taken together indicate known patterns of undersea phenomena, some of which are lobster habitats. The color of the water and the amount of light it is absorbing and refracting can also indicate important ecological processes. Sometimes the water of the undersea world will look yellowish, reddish, or especially dark. These colors can indicate movements of currents that bring the lobster from north to south, or initiate the lobster leaving an area. Light and color distributions undersea also correspond with depth, and sometimes it is the observed darkness that reminds divers to be mindful of navigating too deep. Seeing this way takes skill and the growth of a distinctive aesthetic sensibility, and much like creating effectual works of art, it calls for an expertise not equally distributed among us.

4.2.3 - Configuring Time and Space

If a feature is seen in the distance, such as a bank, hole, or rock, and the diver decides it is close enough to reach while underwater, a CI diver will usually level-off so he may remain at a lesser depth where he has a superior perspective of the ocean floor. Navigating at a lesser depth also has the advantage of conserving air and, of course, the health benefits of avoiding the

dangerous atmospheric pressure encountered at greater depths. Practicing the 30° descent thus has the advantage of achieving a safer and slower descent, while maximizing the benefits of visual perspective and the amount of ground that will be covered while scanning for lobster habitats.

By identifying objects and attending to patterns of light and color undersea, lobster divers are able to perceive a configuration of space relative to their project. Critically important, however, is how this space makes sense to divers not in terms of things simply there, but in how those things are present in relation to their availability through specific forms of action. It is this temporal quality of perceived phenomena that transforms "space," into lived-space. Miskitu lobster divers must understand and monitor several configurations of time simultaneously while hunting lobster. For the CI diver, actions are not planned *only* according to chronological time, but are instead organized around quantities and qualities of air, lobster, pain, exertion, and skill. First, and most important, is the amount of air left in a tank and how long it will allow one to stay at a certain depth and track lobster. At greater depths, it takes more air and effort to expand the diaphragm and tanks empty much faster. Lobster divers often adjust the valve at the top of the tank to reduce the amount of air that will travel through the hose and regulator, and this practice increases their sensitivity to changes in depth and their estimations of the amount of air left in the tank (not practiced or even considered by cert-divers). The patterns of habitats mentioned above are always evaluated in terms of the diver's ability to get to them with enough air to explore them and find lobster. Another way to measure the amount of air in a tank is by its weight, but this is usually done at the surface. Theoretically, a diver could feel his aluminum tank change from negatively buoyant (full) to positively buoyant (less than half full) while he was underwater, but I have not confirmed that this happens among Miskitu divers.

The number of tanks "burned" (emptied), also configures time for the diver while working. If lobster is scarce, and few have been killed during the day, a diver feels that he must be as efficient in hunting lobster as possible and maximize the amount of air remaining in his tanks so he will not come home empty handed. In this scenario the diver is much less likely to take chances and explore unknown areas or habitats that work against his best evaluations of the odds of finding lobster. Thus, the amount of air and tanks burned, and the amount of lobster caught, is time passed; the amount of air in a single tank is the present while underwater; and full tanks on the boat and the need for more lobster is the day's future. The attention one gives to the effective use of air is increased as the lobster season approaches its end and the dive crew begins to contemplate what they will do to earn cash during the four month off-season—when they cannot harvest lobster. In that final month of the season, February, it seems that every dive and every pound of air inhaled at sea is vitally important as one attempts to be maximally effective and bring home lobster. Last, there is the distance a diver can travel underwater in relation to exertion, swimming skills, and the amount of pain felt in the body. Each of these factors manifested as embodied knowledge—will effect how he perceives the distance between lobster habitats and his chances of exploiting them; I explore these factors further in Chapter Five.

4.2.4 - Finding the Lobster

When a diver gets close enough to a potential lobster habitat, he will immediately evaluate its condition to determine, if he should dedicate precious air in his tank to inspect it for

lobster. "Rocks" and "banks" are the most sought after habitats, and can usually be classified as dead, dying, or living, from a distance of fifty feet or more. Dead habitats are ignored, while dying and living habitats are potentially explored depending on the amount of life they are perceived to sustain. Living rocks and banks are bright, colorful, and "flowered," meaning that they have a great amount of foliage growing from them. This foliage is usually accompanied by a large number of fish and other forms of aquatic life. "Dying" rocks and banks still sustain life, but one can see the colors are fading, and certain types of foliage have all died. A diver will explore a dying habitat, if it looks like it has particularly good ridges and holes where lobster might hide. Nearly all "living," healthy looking habitats will be inspected as available air permits.

A diver approaches a habitat cautiously and gently so as not to kick up sand or make predatory gestures that will send lobsters into hiding. Spiny lobster become active in the night and spend most of the day hiding from predators in holes and under ledges of rocks. Divers must look carefully to find them, as sometimes it is only their thin antennas that can be seen extending from a hole or crevasse. What is helpful to the diver is the way that lobster sometimes guard their habitats with a single lobster stationed out in front of it. If a diver can approach the stationed guard carefully enough, he will be able to slide the hook at the end of his barilla under the lobster and then with a quick pull he will hook the lobster under the head and bring it up to his grasp. Once the diver gets ahold of the lobster, he stabs it in the underside of its mid-section with his barilla to kill it. When the lobsters inside see the guard has disappeared, a new lobster comes to relieve this station. The activity is repeated until a lobster fails to replace the last taken guard. This process is difficult and takes much skill, for if the diver misses the guard on the first try, he

will send it into hiding and may not be able to reach the other lobster inside who attempt to hide in the furthest recesses of the hole for fear of a predator. The constant movement encountered undersea, even at greater depths of one hundred feet or more, makes sneaking-up on the holes and crevasses housing lobsters very difficult. Inhabiting the depths of the sea means learning to skillfully navigate a world of perpetual motion by expanding and integrating into it. You do not overcome it, you become an aspect of it.

It is proper buoyancy control breathing that helps divers effectively accomplish this task more than anything else. During a video review session with a diver, I noticed that he did not expire air bubbles while he was in the process of hooking a lobster. He would swim up just above the lobster habitat, and then duck his head slowly to look inside and see if there was lobster, or at least a "guard." If lobster were present, he would exhale so his body would slowly sink in front of the habitat, and then without taking a breathe, he would attempt to hook a lobster. If successful, he would then inhale, his body would raise to the position in which he started (above the "lobster hole" so they cannot see him) and he would kill the lobster he had hooked. This technique was effective because it gave his body the steady movement and stability needed to hook the lobster without scaring them into hiding. Moreover, by not expiring bubbles in front of the habitat, the lobster apparently did not know there was a predator at the gate. Some divers place their left hand on a nearby rock as they perform this technique, especially, if there is a strong current making stability more difficult while attempting to stay in one place.

As discussed in Chapter Three, undersea objects appear larger and closer and this can lead to misjudging their distance and proximity to one's self and other objects. Knowing this, we can presume that the dexterity and delicacy needed to hook a lobster is difficult to harness and

enskill. This is true, but the lobster diver learns to use his barilla effectively in a relatively short amount of time through trial and error for the same reasons he learns to use his extended tank to evaluate environmental conditions. The effectiveness involved in using the barilla is not a matter of reasoned calculations to determine the "actual" (objective) size and distances of things in the aquatic environment, but is more an activity of extending sensorially through the barilla, that is, extending one's sense of touch through it in evaluation of it's length and proximity to other objects. The divers shorter barilla feels different underwater than his longer barilla, they move differently when waved within the density of the water, the longer one slowing the movement or his arm more so than the shorter one, thus providing indications of size and proximity as they present themselves within the ecology of the undersea world and his emplacements within it. Much like using his own hand to approach and grasp an object undersea, he can sense the barilla's approach to objects and learn to use it effectively to hook lobster. His sensorium flows through the body, the hand, the *barilla*, and into the viscosity and habitats of the undersea world. If this process depended on rational evaluations stemming from representations produced in diver's private mind, he would surely fail. His body, however, knows how to emplace itself to effectively perform these techniques. After hooking and then killing a lobster, it is then dropped on the ocean floor where the effective lobster diver creates a pile. After emptying a lobster hole, a diver will explore an area of roughy thirty feet away from his pile of dead lobster to look for additional habitats, but moving much further away reminds him that other predators—such as sharks, rays, seals, and large fish—can come and attempt to eat his catch. When he is ready to resume his navigations, he will hold his lobster by the antennae in his gloved left hand and surface when air begins to run thin through his regulator.

Accompanying all the activities mentioned above—and intentionally not addressed in this chapter—is the diver's ever-present concern for his own safety and a (tacit) monitoring of his own health while diving. The extreme dangers of this kind of diving and how these divers attend to pain and accidents while working undersea is the focus of the next chapter. From what we have learned here, however, it should be clear that hunting lobster is not an activity accomplished by incompetent unskilled men who rely predominately on tactics and luck. These divers employ *strategies*, evoked and shaped through the navigations of enskilled bodies attempting to accomplish a culturally significant, and socially structured, activity-unfolding-in-context.

4.3 - Discussion

This chapter begins an exploration on how the presence of phenomena and the significance of objects, events, and actions, emerge from structured interactions and a complex assemblage of embodied skills. From a semiotic perspective, demonstrated later in the chapter, we see how an array of *indexical signs* (Peirce 1991 [1868]) made relevant through embodied interaction, and finding significance in relation each other, assists the novice diver as he "progressively comes to an object," such as reefs or banks in the distance (C. Goodwin 2016, personal communication). But before this can happen, these divers must first find an embodied stability in this incredibly disorienting undersea environment. Enskillment processes mean synthesizing a complex array felt qualities emerging from structured embodied action to control the body and attend to it and the environment in ways advantageous to the task at hand. In demonstrating this process, the analysis above contributes to the unique "ontological" aims of this dissertation by demonstrating how phenomena "come into being" for novice lobster divers

through embodied action. The seasoned lobster diver becomes integrated into a sentient ecology and comes to inhabit the constituted temporal and spacial qualities of this otherworldly place, even if only temporarily. The skilled lobster diver has a body that "knows" how to get the job done and it does so with very few of its fine-tuned actions being focused upon.

4.3.1 - Structural Violence, Political-Economy, and the Materiality of Enskillment

Structural violence directly contributes to the enskillment processes outlined above in the way it constrains and enables the availability of certain technologies and tools that mediate embodied engagements with the environment. In the analysis above, the mask, fins, tank, barilla, GPS, etc., in conjunction with the aims of the diver and crew (to descend and find lobster) all work to structure enskillment processes and thus shape the way one comes to perceive the undersea environment and bodily conditions. The practices above, for example, would not be possible without the unique design of the panga. It's low rails let divers get in and out of the boat quickly several times a day and allow the captain or diver to put a mask on and dip their heads into the water to see the ocean floor before getting into the water. It's light weight allows for a smaller outboard motor that uses less fuel, providing the crew a larger range of ocean to explore in search of lobster. And the lack of scuba technologies, such as depth gauges, air pressure gauges, buoyancy control devices, and dive computers, has afforded the development of the thirty degree headfirst descent and buoyancy control breathing to stabilize their bodies, sense bodily processes, and inhabit the underwater world. Looking closely at political and economic processes and structural violence can help us explain how commercial lobstering has become the primary economic activity on the Caribbean Coast and why certain technologies have become

available to exploit the resource. The history and socio-political context of Nicaragua's Caribbean Coast can even help us understand why lobster divers are overwhelmingly people who identify as Miskitu. What is unique here, however, is the demonstration of how the materiality of structural violence and political-economic processes affect embodied interactions and thus contribute directly to sensory and attentional attunements and processes of enskillment.

As pointed out in Chapter Two, Miskitu individuals usually feel an affinity towards the bush and the sea, an orientation stemming in part from the Miskitu people's long history of small-scale subsistence practices that include hunting and forging from forests and reefs outside the village. This orientation also fuels a sense of capability that contributes to bringing some men to diving in the first place. In coastal villages, Miskitu children grow-up swimming in the ocean and exploiting its resources. Even if they have never dived to bottom of the sea with a pressurized tank, they usually enter the water as confident swimmers who are less likely to be scared of what the sea holds. So, although the technologies highlighted in this chapter do afford certain kinds of engagements with the oceanic environment, we must remember that previous interactions with the sea have sedimented themselves in the embodied knowledge of Miskitu men even before they attempt lobster diving.

Within the discussions of underwater sensory orientations and perception, this chapter of dissertation draws attention to the high degree of concentration, skill, and knowledge that is needed to be a productive CI lobster diver. This focus on complex embodied skills and knowledge runs counter to many portrayals of the Miskitu lobster diver. The pre-objective *experience* of the body performing as expected to navigate this extraordinary environment without the exertion of conscious effort, constitutes the substrate out of which that intuitive sense

of unity between self and body emerges, therein generating not only the "for-me" undersea phenomena presented in this chapter, but also an "I-can" orientation towards the self that extends beyond one's work practices. Seasoned CI lobster divers experience themselves as somewhat in control of this very dangerous activity, not because they necessarily regard themselves as inherently smarter, tougher, courageous, or more knowledgable, etc., than others in their community, but because their enskilled bodies tacitly inform a capable sense of self. This topic is taken-up explicitly and in detail in the next chapter.

CHAPTER 5

ILLNESS AND THE ENSKILLED BODY

As a CI lobster diver *moves* through the environment, he more effectively enacts his enskilled ability to sense the various symptoms of dive-related illnesses. By this I mean that many of the indexical signs of bodily conditions are revealed to CI divers through the unique structure of their work practices, and the ways in which sensory modalities have become culturally elaborated through specific forms of social interaction, uses of technologies, and emplacements of the body. The process of enskillment here underwrites an awareness of another form of movement in the way that the diver comes to focus their attention on the severity of their dive-related ailments by monitoring and tracking how illness phenomena move within the (moving) ailing body. If you were to ask a random CI lobster diver about decompression sickness, he would most likely be able to provide you with a layperson explanation of the biophysiological processes that result in nitrogen being held in the body and causing damage; however, this is not how CI divers typically perceive or think about dive-related illnesses as they perform their labors under the sea. Instead, divers attend to the movements, fluctuations, and qualities of phenomena such as stiffness, pain, pressure, and the internalized sensations of hot and cold—all of which index degrees and qualities of illness. The aim of the capable CI lobster diver is effective management of these symptoms, so they might recover from the inherent damage done to the body while engaging in this brutal work. Although they rarely talk about it openly, contending with chronic pain is typically regarded as part of the job.

5.1 - Attending to the Ailing Body

In Chapter Four, I offered detailed descriptions and modelings of the specific movements and emplacements of the body stemming from the "head-first descent" to demonstrate how lobster divers come to attend to both the environment and their own bodies (as situated within the environment) through a form of sensory attunement that allows them to body-forth and accomplish their specific aims. The otherworldliness of the undersea world opens-out for the enskilled lobster diver, becoming navigable and temporarily inhabitable. A unique array of practices and technologies are harnessed through specific forms of interaction to in-corporate the undersea world, therein affecting how one extends sensorially into the depths of the sea and orients towards the body itself as an aspect of a larger ecology of processes. Unlike the cert-diver (such as myself, for example, as described in Chapter Three), the CI lobster diver does not orient towards his technologies in such way so as to identify and ascertain the conditions of discrete objects in isolation, or as abstracted from a dynamic ecological context—as I do when I look to my diver-computer to indicate nitrogen absorption. The cert-diver understands the icons on their computer as representing a process where the body becomes exposed to differing atmospheric pressures, and nitrogen becomes absorbed and trapped within bodily tissues—there are standardized thresholds that the generalized cert-diver should not cross. The CI lobster diver, by contrast, is constantly attending to the interrelationships of in-corporated phenomena to ascertain the ways in which sensations, or "feelings" in the body, and environmental conditions come into being and index dangerous changes; he is attending to relevant processes through the particular structure of his enskilled involvements in a sentient ecology. The section below begins an

analysis of the ways in which CI divers come to orient towards and understand bodily sensations, and the phenomena they index, while monitoring qualities of pain and damage done to the body.

5.1.1 - Pressure Without, Pressure Within

Much of the past research conducted among Miskitu lobster divers has produced findings that contrast with my own in many ways (see World Bank 1997; Dunford et. al. 2002). Some studies maintain, for example, that Miskitu lobster divers do not demonstrate a scientific knowledge of the physiological impacts of navigating various atmospheric pressures when deepwater diving or the bodily damage that can be incurred through nitrogen absorption. There is some truth in such statements, since Miskitu divers do not receive professional training in scuba techniques and technologies, or instruction in oceanic physics and bio-medical renderings of the physiological impacts of deep-water diving. What these studies lack, however, are detailed examinations of the forms of knowledge these divers do bring to their dive practices. Because such studies have relied primarily on verbal articulations offered by lobster diver informants, without tracking how the terms referring to dive related phenomena emerge-from and index embodied experience, the ways in which these divers sense, perceive, and understand the environment and its relationships to their own bodily conditions are often ignored or misconstrued. Notions of "breeze," "pressure," and "heavy water," for example, are easily misinterpreted by outsiders because they are reduced to their denotive-referential meanings in North American and/or European standardized versions of the English language. In this section, I explore how these terms connect to embodied experiences, and argue that they can only be

understood in their interrelatedness and how they index different aspects of important processes that lobster divers must attend and attune to.

Any person diving more than ten feet under the surface of the sea will immediately feel the pressure begin to exert itself upon the body. It is usually felt first in the ears. The soft tissue of the inner ear begins to compress as one descends, but if air trapped in the ear prevents this collapse, a sharp pain will result. One of the first lessons taught to scuba divers is how to "clear" the ears as one descends. CI lobster divers may not have the training needed to determine the atmospheric pressure quantitatively (see Chapter 2), and dive-computers are not available to display the exact depth, but they do indeed carefully attend to fluctuations in pressure as they descend. In addition to the inner ear, there are many other indications of an increase in atmospheric pressure; for example, one's mask begins to press itself more tightly to the face during descent, making it more difficult to adjust, if it feels slightly out of place. Once the diver reaches the bottom, he will don his back-strap (with tank) by placing it on his back and securing it with a belt that is clapped in the front of his waist. But if the belt grows loose while working, it could be an indication that the body has compressed further since he secured it (because of an increase in atmospheric pressure). This sometimes happens when divers follow the declining slope of the ocean floor as they continue their hunting. The most important way for these divers to assess atmospheric pressures, however, is through their breathing (Chapter 4). Greater atmospheric pressure compresses the lungs and more effort is needed to expand them and fill them with air; one must work harder at inhalation. Thus, divers attend not only to the external pressure (of the environment) exerting itself upon the body, but also to the internal pressure of the air entering the lungs from the tank and its ability to assist in expanding the lungs. This

relationship between the expanding lungs and external pressure is the first step towards understanding how these divers come to attend to pressure within the body, felt primarily in lungs, blood, and stomach. It is, in fact, the fluctuating relationships between external pressure and internal pressure, determined by attending to sensations associated with the *movements* of phenomena, that informs CI divers of environmental and/or bodily conditions.

In the early days of my fieldwork at sea, CI divers would explain to me the importance of attending to "the breeze" when determining pressure and assessing bodily fatigue. In response to such comments, I diligently approximated the wind speed and weather patterns for each day we went out to sea together and recorded them in my waterproof notebook. What I did not understand in those early days, was that the divers do not refer to the air in the tank as "air," but instead perceive it as it functioning in context; that is, as moving, flowing, and meaningful as it functions within an larger ecology where one must fill the lungs during an activity. Once again I was confronted with my tendency to treat phenomena as discrete scientific "objects" abstracted from context and lived experience. Just as "the breeze" encountered at the surface is inhaled as it is delivered within larger weather patterns and fluctuations in atmospheric pressure (as measured perhaps with a barometer), so is the air within the tank, as the diver navigates the different atmospheres below the sea. What is important to the CI diver, however, is not simply how much effort is needed to expand the lungs, but how the breeze is sensed as *moving* through the lungs and how the lungs feel as they expand.

If the air tank is near full while diving (the pressure is high in the tank) and the lungs feel very sluggish when fully expanding relative to depth (depth as indicated by other signs, the amount of light, for example), it can be an indication that pressure within the body has increased,

and this can be dangerous. The sensations attended to are not confined to the lungs expanding, but the feeling of air moving within the lungs and body, "the breeze" flowing-into and out-of the lungs.² Does the flow feel internally disrupted? Does it feel like it is not reaching or cannot pass deep into the lungs, as if it has been redirected, or slowed, and cannot circulate correctly? If a diver must exert more effort to fill the lungs in such a situation, is their pain? A soft pain as the lungs get close to full capacity can index that one's body is growing fatigued and there is indeed excessive pressure within the body relative to depth. The diver will also assess the flow of air in his stomach, if he is feeling a soft pain in the lungs. Divers generally like to dive with a somewhat full stomach as they do their work. While working, the stomach should not grumble, especially for lack of food. Putting food in the belly is an important strategy to regulate the flow of the breeze within the stomach and body. It is said that lobster divers who do not eat enough "good food"—generally rice and beans with some form of protein—put themselves in danger of being "hit by the pressure" (becoming ill). Initially I correlated this only with a need for proper nutrition, but controlling the breeze in the stomach is an equally important second reason to eat correctly. Divers who are burping excessively while at sea or find themselves with an upset stomach that cannot be placated, should be very careful to monitor the pressure within the body. What makes this monitoring process even more complex is that the diver must assess wether "the breeze" not flowing correctly is the result of increased external pressure due to depth, lack of air pressure in the tank, or indeed a build-up of pressure within the body. There are other sensations that serve as bodily indexes to help determine this, including the movements and flows of blood and pain through the working body.

5.1.2 - The Movements and Qualities of Pain While Working

The movements and flows of blood, stiffness, and different types of pain are best assessed through the moving body, and can indicate excessive amounts or forms of pressure in one's body. CI lobster divers often move rapidly through the water, utilizing powerful finning techniques to maintain their momentum and explore large expanses of habitats in search of lobster. There is a great deal of physical exertion involved in this kind of swimming for several hours a day, and fatigue is usually felt first in the shoulders, hips, and lower back. Most seasoned lobster divers feel stiffness in these areas of their bodies towards the end of the day. If the stiffness is confined in the shoulders and hips and does not move or expand, it is generally understood as an expected consequence of the job. Most divers it seems do not consider this kind of stiffness to be an ailment by itself, and even as I watched divers stretching their shoulders and legs in response to stiffness, they would usually respond to my questions about discomfort with an insistence that it was "nothing;" however, stiffness can signify the first step in a process of illness coming into being. Stiffness can intensify, spread, and move, thus indicating a disruption in the movements of other important phenomena, such as the flow of blood and one's internal breeze. Again, it is through the unique movements harnessed to navigate the undersea world and snaring lobster that one becomes enabled to (sometimes tacitly) evaluate the qualities of stiffness while working—it takes the movement of the body to perceive and make relevant other moving phenomena connected to illness.

If stiffness intensifies and begins to spread, or is accompanied by mild aching, one should pay close attention to directions of its movements. Intensified stiffness and mild aching in the shoulders, for example, can migrate towards the neck or upper back areas, and become more

threatening. More common, and more serious, is when stiffness in one's hips migrates to the lower back and is accompanied by intensified pain and slowed mobility in the legs. CI divers describe some undersea environments as having "heavy water." When I asked other, non-Miskitu, residents of Corn Island about the notion of heavy water they usually laughed it off and attributed the idea to exotic, and irrational, Miskitu beliefs and misunderstandings of the natural world. In an attempt to make this very point, a Creole resident once asked me rhetorically while shaking his head in disbelief, "How could one bucket of water be heavier than another bucket of water?" But CI divers do not conceive of seawater as abstracted from the larger oceanic ecology and their integrations and navigations within it. For CI divers the term refers to the felt qualities of diving in certain undersea habitats where one encounters extreme depths/pressure, cold water, and "down currents" that push one towards the ocean floor. "Heavy water" is more difficult to move through and can therefore bring on fatigue more quickly. When divers begin to feel the symptoms listed above (the movements of stiffness, pain, etc.), the water may begin to feel heavy, and they must determine if the heaviness is due to the environmental factors listed above, or because pressure is building in the body and increasing one's chances of encountering illness (or perhaps both!). They do this by assessing the interrelatedness of the many indexical signs presented in this chapter and Chapter Four. As demonstrated in Chapter Four, these signs become possible and are enacted through specific embodied practices, and attended-to differentially through processes of enskillment. For example, a CI diver attends to several indexical signs to determine depth, but if it is difficult to expand the lungs relative to these other signs indicating depth, then the diver might foreground his awareness of his own bodily condition and monitor more closely the pressure within.

If pain migrates to the lower back, sharpens, and is accompanied by an experience of fatigue and sluggishness in movement, one should not push one's body any further. In response to such symptoms, CI divers will often ascend to a lesser depth and assess again the movements of excessive stiffness, the breeze, pain, and sluggishness. All of these phenomena are understood and assessed in terms of their movements, but in which direction they move, and how they move, is of vital importance. Movements of stiffness and/or pain towards the neck, back, and head are considered especially dangerous. If one begins to experience dizziness or feel sharp pains in his head or back while ascending in response to sensations indicating illness, he should stop at the depth where he feels the least discomfort, swim slowly, and then attempt to ascend very gradually while continually assessing bodily and environmental conditions. Pain and stiffness should stop moving inward, towards the center of one's body, and begin to move outwards towards the extremities (excluding the head). This whole process is, of course, much easier described than accomplished. There is an important emotional component involved in the phenomenal experience of illness coming into being that profoundly influences the particular courses of action mentioned above. When distinct signs and symptoms of illness become apparent, and a diver diverts his awareness to confronting his ailments, the otherworldliness of the undersea environment can begin to reveal itself again. This vast oceanic space, opened-up and made temporarily inhabitable through processes of enskillment, can begin to close-in upon the diver. The visceral response to this lived-space beginning to collapse in upon you is to escape, and in this situation, it means swimming desperately for the surface. CI divers speak often about controlling their fear, of not "feeling afraid," of not panicking when encountering trouble while underwater. If a diver is experiencing severe symptoms of illness undersea and

surfaces quickly, he drastically increases his chances of "being hit by the pressure"—an observation made by CI lobster divers that corresponds closely with decompression theory (Chapter 3).³ Once on board the panga, if a diver is "hit," he might not be capable of getting back into the water and ascending to a depth that will re-compress the excess nitrogen in his system or find the appropriate depth to regulate the external and internal pressure, as a CI diver would put it (see Chapter 6). The pain is so severe and abrupt that it is often described as incapacitating one's ability to move—a feeling of being shocked and simultaneously stabbed by a knife. The abrupt sharp kind of pain analogous to being shocked, is by far the most dangerous, and always indicates that a dive-related illness has revealed itself. Andre, the diver introduced in the Introduction, was able to descend after being hit by the pressure at the surface, but he needed a very capable crew to assist him, and although he suffered from disorientation, he was fortunate to have been aware enough of his condition, as he was experiencing it, to attempt to help himself. As we will see in Chapter Six, the disorientation can sometimes be so severe that getting back under the water is not a possibility. When a CI diver finishes his work at sea, his attention to the indexical signs of illness do not end, as he must continue to monitor the movements of stiffness, pain, and the breeze.

5.1.3 - Bringing the Pain Home

Although the enskillment processes focused upon in this dissertation take place largely at sea, or under the sea, where one is forced to contend with "the pressure" and attune to an incredibly unique environment, divers do bring their enskilled abilities home with them, where they continue to attend to bodily processes so they may assess their ailments. At the surface, a

lobster diver can still engage in practices that will facilitate an advantageous movement of illness related phenomena. Pressure can still be sensed within the body, although the ways in which one attends to embodied phenomena are somewhat different because of the environmental context at the surface (temperatures for example). As with the oceanic environment, CI lobster divers do not conceive of their terrestrial environment as being an entirely stable, neutral, or controlled space, in which their bodily conditions and illnesses can be transparently identified. Sensations felt within the body are understood in relation to how the entire body feels as it navigates the environment—the moving phenomena within the body sensed and meaningful in relation to the entire body in motion. The moving internal phenomena that signify—and contribute to—illness are understood relative to a larger ecology of processes and one's navigations within that ecology. For example, CI divers can sometimes sense changes in atmospheric pressure while on the Island. Changes in the weather bring about changes in the environmental pressure that can be felt within the body as stiffness, pain, and changes in one's internal breeze and/or pressure. Many divers, in fact, describe these changes in external pressure as being delivered by the wind ("breeze"). If it is the "north wind," atmospheric pressure changes might bring pain to joints while simultaneously indicating the migrations of lobster moving south towards Nicaragua from the north. Aches, pains, and lobster all migrate relative to each other. The changes are understood and felt incrementally, and in relation to movements of other important phenomena and broader ecological processes, not as local environmental conditions simply changing from one discrete classification to another. Thus, as a diver recovers from a day of work under the sea, he continues his assessments of environmental and bodily conditions, and attends to the movements of

phenomena associated with illness. With the terrestrial context, however, CI divers orient differently towards temperature changes.

The hot and humid tropical weather experienced by Caribbean lobsterers can make inherently hard work at sea even more brutal. A rouge wave crashing over the rail and soaking the crew offers them little relief from the heat. Even the seawater is warm. Miskitu people who gather their drinking water from a well, typically refer to fresh water as "cold water," in recognition of it's contrast with warm seawater. Many Corn Island seafarers returning home from a long hot day of work will seek out cold beer to cool themselves and relax their bodies. CI divers, however, have a very different experience in terms of environmental temperatures encountered. Because they spend a large portion of their day at the bottom of the ocean, their worry is more about staying warm than finding respite from the oppressive midday sun. Not only is the water significantly cooler at greater depths, but just the fact that they are immersed in water for such extended periods of time is enough to bring a chill to their bodies. As pointed out in Chapter Three, if the water temperature is lower than one's body temperature, it will conduct heat from the body—especially if he is not wearing a wetsuit. What helps these divers is their surface time between dives. If a diver is beginning to feel a chill because of a cold undersea current or particularly deep dives, they will usually take an extended amount time topside so they may warm themselves. After a rigorous day of work, a diver may still feel a chill or coolness moving through their body, or worse, feel a chill or pain in a location that seems to not be moving—in the shoulders, for example. To assist the movement of a coldness from a particular location of the body, one should warm himself with clothing, make sure to consume warm foods (cooked foods), and refrain from cold beverages. Several CI divers that I accompanied out to sea,

refused to drink cold beer with their crews immediately after returning to the Island. Instead, they would consume milk stored at room-temperature upon returning home. Later in the evening, if they decided to drink alcohol, they would begin with rum, as it's warmth in the body would facilitate an advantageous movement of excess pressure. Many divers will refer to pain and stiffness that is moving too slowly as a site of "infection." The meaning of the term "infection" in this context differs from the Western bio-medical definition. Divers do not mean to say that they have contracted a communicable disease and have thus become host to a parasitic and harmful foreign organism. Again, the term is referring to embodied phenomena that are not moving as expected through one's body, thus producing indexical signs—such as pain and stiffness—that will indicate "sickness," if they are persistent and deemed excessive. Unmoving pain and/or stiffness can be accompanied by swelling and trembling, two additional indications of "infection." If the "infection" does not improve through the night, a seasoned diver knows that he should suspend diving activities until his condition improves. A diver will typically avoid a trip to the doctor at the local clinic as long as he feels he has not been "hit" by the pressure. Pain and stiffness that moves slowly—and even "infections"—will work their way out, if one orients correctly towards the signs of movement and illness, and knows how to properly care for oneself.

According to divers, caring for yourself in the proper manner when suffering from diverelated ailments is fairly straightforward, although this is not to say that it is easy for all divers to accomplish. As mentioned above, eating the correct foods can be an important part of the recovery process. An analysis of the data recorded for this project does not seem to indicate a complex humoral theory involving an elaborate classification of foods—as hot, cold, etc.—that should be consumed or avoided in relation embodied and/or environmental conditions. There

seemed to be great variation, or indifference, in regard to what foods others might consider innately hot and cold, and most divers it seems were satisfied with drinking beverages, especially milk, at room temperature and consuming cooked food that was still warm when ingested. The basic underlying principal seems to be that you should not ingest something chilled when you have an infection of coldness in the body. One should also keep the body moving. The body of an ailing diver will need rest, but the diver should not stay still all day or he will not be able to accurately sense, assess, and facilitate the proper movement of illness-related phenomena. Perhaps the most important way to promote one's recovery and ready the body for work is to abstain from alcohol and illicit drugs (elaborated further in 5.2.2 below). Excessive consumption of alcohol is considered especially dangerous to ailing lobster divers. I have recorded dozens of "accident" narratives that begin with a description of heavy rum or beer drinking the night before a dive accident. Finally, a diver must be careful not to betray his better judgment and go back to work too quickly. Again, these paths to recovery may seem quite simple, but as the sections below will demonstrate, decisions to dive can be very difficult and indiscretions can be very costly in this context of structural violence.

5.2 - Enskillment and the Capable Self

In the preceding chapters I have continually emphasized the *otherworldliness* of the oceanic environment, the precarity it embodies for those who choose to navigate it, and the potential it has to disorient individuals with its hyper-dynamic character of continuous movement. As Anita Maurstad (2010) has written in her research on experiencing seascapes,

"....the sea is so dangerous. It can suddenly, without warning, take full control over your body and life" (42). I can only agree with Maurstad on this point. This is why we hear people say that they feel "at sea," when they encounter disorienting situations in their everyday terrestrial lives. It takes prolonged engagements with the sea and the technologies we use to navigate it to harness the very specialized skills needed to inhabit the oceanic environment and become a competent crew member. The inordinate effort and resilience needed to become a skilled seafarer usually earns them respect; we have many cross-cultural depictions of competent seafarers earning the admiration of others in their communities and beyond—even as we sometimes struggle to discern the contours of their adventurous character (see Hutchins 1995). Conversely, incompetent seafarers who somehow find a way to make it out to sea regularly despite their lack of skills can be considered especially foolish. Thus, there is a particular way of orienting towards those who work at sea as certain kinds of moral persons. For CI lobster divers, and those who are somewhat familiar with what they do, the precarity of the sea is exaggerated and compounded, because divers must navigate above and below its surface. In fact, the job is considered so inherently dangerous by most CI community members, that it is deemed essentially foolish and primitive. Divers who are injured permanently will fail in the most basic of moral imperatives when they are no longer able to economically support themselves or their families. There is also the pervasive conviction that lobster divers are doing much more harm to the undersea ecosystem than lobster trappers. CI divers must carry this burden of wide-spread disapproval, in addition to the many other deep concerns they bring to their work each day.

But the Creole and "Spanish" people of Corn Island are not the only ones who look down on lobster divers as foolish and/or morally corrupt. When Miskitu people observe lobster divers

who do not properly care for themselves or seem to have little regard for their own welfare, they are sometimes referred to as *diawan* in the Miskitu language, the term for animal; however, those lobsters divers who do demonstrate themselves capable of effectively caring for themselves by way of their embodied knowledge, as outlined above, and by making astute decisions regarding when, where, and how he should dive, construct themselves as particularly worthy of respect in consideration of their especially demanding job. They are sought-after for their skills and sound judgment by other panga crews. Good lobster divers are usually good men, who show up to work regularly, accurately assess and attend to their own health, and are therefore able to bring home lobster (cash) consistently. The money earned benefits not only the diver's family, but the families of the entire crew (dozens of people), earning the diver considerable social capital within his Miskitu community. Below I explore further how diver successes can facilitate a process of re-orientation towards the moral self and personhood within the broader Corn Island community. As the sections below will demonstrate, these re-orientations can be tenuous and/or fragile, but can also lead to new forms of engagement with socio-political regimes in Nicaragua.

5.2.1 - Chronic Pain and Moral Personhood

On a hot and humid Sunday afternoon I'm walking down one of Corn Island's busiest streets with a seasoned lobster diver named Ernest. Taxis honk and impatiently zip around each other, while motorcyclists swerve off the road completely in attempts to avoid waiting for the congested taxis altogether. I ask Ernest why people on Corn Island never seem to be in a hurry until they enter an automobile or ride a motorcycle. He laughs and shakes his head, he has heard my complaints on this matter more than once. As we continue our walk, Ernest occasionally

reaches his hands towards he sky with a stretch, and then swings his arms in large circles. I ask him if he is feeling pain in his arms from diving and he casually informs me that he is not. A little while later I broach the subject again as he stretches, and he describes a stiffness and throbbing in his shoulders. He says again there is no "pain," as he makes a jabbing gesture with his index finger, but the throbbing does "hurt" some, he admits. After spending several months with seasoned lobster divers, I learn that most of them feel this kind of stiffness and throbbing in the shoulders on a regular basis. Most of the time it presents itself at a certain time of the day and then retreats, but it might also come with certain weather patterns. Many of the younger lobster divers—the divers I do not refer to as "seasoned" because they have only been diving a couple of years or less—do not typically feel this sort of hurting in the shoulders. I conclude that the seasoned divers are most likely feeling chronic pain in the shoulders—and sometimes in the hips —because nitrogen bubbles are restricting blood flow to these especially active joints, therein promoting degenerative effects on bodily tissues and neural pathways. This would explain why the less experienced divers do not sense this sort of discomfort on a regular basis. One of the doctors at the Corn Island medical clinic agreed with this theory, but he reminded me of the great diversity of symptoms and outcomes connected to decompression sickness. When I spoke to CI lobster divers about it, they did not necessarily reject the explanation—they know that excess nitrogen in the system causes physiological problems—but again directed me to consider the dangers of "the pressure," a more inclusive conception of bodily processes and how different phenomena feel when moving through the body. Interestingly, they did not usually consider experiencing such symptoms as living with chronic "pain."

CI lobster divers perceive "pain" (even dull pain) as something more concentrated in the body than the more dispersed mild aching and stiffness in the shoulders described above. Again and again I would see divers stretching their shoulders and hips on days they had not worked undersea, sometimes even divulging a slight grimace, and time after time they would respond to my questions regarding the severity of the discomfort with replies such as, "its nothing." While contending with the brute force of pain is without a doubt a human universal, the ways in which it is experienced, articulated, and made meaningful through somatic modes of attention, forms of social interaction, and cultural idioms, has made cross-cultural encounters with "pain" an important topic in medical anthropology (see DelVecchio Good et. al. 1992; Throop 2010; Buchbinder 2015). The social process of working through pain, for example, can be simultaneously a process of working on the moral self and (re)orientations towards notions of ethical personhood (Throop 2010). Anthropological illustrations of people confronting pain can thus demonstrate generative processes involved in reinforcing and/or challenging cultural patterns and subjective experiences. As I pressed my inquiries about this form of chronic aching, some divers would relent and remind me that work in Nicaragua is hard and typically comes with discomforts. For those who stay busy working, discomfort it seems is considered "ordinary." Among CI lobster divers, the aching they often feel, not the "pain," aligns them with Nicaraguan people more broadly, and all others in the Corn Island community who physically struggle to make a living in a very poor country. The work is often "brutal," the money comes hard, and the body absorbs the mistakes and inadequacies of Nicaragua's low economic standing in the world. The shortcomings and destitution of Nicaragua manifests itself in the workers body as chronic discomfort. The dull aching one wakes with in the morning, points to the country's position in a

transnational hierarchy of wealth and power, Nicaragua operating from the lowest rung. It is in part through this nagging discomfort, that CI divers imagine a more inclusive national community of people, who despite a broad range of cultural and ethnic differences, have this form of suffering in common (Anderson 1983); imaginings of one country, bound by common sufferings. By denying this chronic aching the status of a transitory "pain," they domesticate it and place it within the everyday of Nicaraguan life, and in so doing identify themselves as Nicaraguans—an identity rightfully available to them that does not necessarily distract from their indigenous identity (see Kroskrity 1993). As suffering Nicaraguan citizens, they feel that they deserve the same privileges that all others are afforded in the nation. This particular orientation towards chronic aches and discomforts in the body, however, should compel us ask why is it that these men do not connect "pain" itself to the suffering of all Nicaraguans?

The lobster diver's "pain" is regarded by them as a pain of their very own. It is not experienced by those who do not consistently dive for lobster in Nicaragua, it is entirely unique to their specific form of the endurance and the skill-set they embody. It grows from their social histories and their ambitions to provide for their families, despite the demands, and their orientations toward a better future. They do not see themselves as foolish; their pain indexes their intense ambitions to hold-on to a moral life by keeping the worst products of abject poverty at a distance. Diver-related pain in this cultural context is a way of being in the world that is foreclosed to non-diving others. Thus, Miskitu articulations of "pain" in this context emerge as they are juxtaposed to the chronic discomfort and wide-spread sufferings experienced by so many Nicaraguans. Divers sometimes experience an alignment with Nicaraguan people through their ailments, but at the same time they can experience themselves as enduring something

entirely unique that has emerged from their sense of a capable self, their indigenous identity, and the historical interactions that their ancestors have had with competing groups in their country. Most CI divers do not experience the most intense forms "pain" associated with lobster diving on a daily basis, and when it does reveal itself, they usually feel *capable* of managing it's release (as outlined in the early sections of this Chapter). From the diver's perspective, they do not *live with* chronic pain, but rather confront and contend with it by appropriately harnessing their enskilled knowledge to control it. To keep the pain moving is also to keep the body and self moving towards moral possibilities.

The specific way they have come to perform their dive practices, as demonstrated in Chapter Four, instills in them a sense of capability (NOT necessarily *machismo*). Successful divers not only know how to effectively navigate the undersea world to find the lobster while simultaneously monitoring their bodily conditions, they also cultivate distinctive orientations towards broader ecological processes that assist them in determining when, where, and how to dive in order to be successful. Unlike those who trap lobster, they observe processes below the surface and thus have insights and options not available to other lobsterers. It is not simply bringing home money that constitutes this sense of capability, it is the experience of movement, and ability to reliably body-forth into their environment and consistently commit to advantageous courses of action and present themselves as knowledgable. Lobster diving can offer more than monetary success, it can offer them a certain amount of independence and personal autonomy in a place where everyone's goal it seems, is to own their own boat so they may work for themselves and reap larger rewards when they find the lobster. As "panga divers," they enter into the lobster industry with a sense of some control over their own bodies and

futures. Effective CI lobster divers experience themselves as moving toward horizons and plan accordingly; and in the way they become capable of shaping how they move towards their futures, they also find new ways of participating and integrating into the larger Corn Island community. The members of successful dive crews are capable of participating more productively in the local cash economy and demonstrate moral alignments with their Creole and Mestizo neighbors by doing so.

Even though lobster diving is considered a primitive practice and harmful to the local oceanic ecosystem by the vast majority of non-diving Islanders, the fact that a particular person participates in the lobster diving industry can sometimes be rendered nearly invisible in daily interactions with Corn Island community members. I have presented enskillment in this context as a process of sensory and attentional attunement, but in the way a multiplicity of skills come into being to assist panga crews in accomplishing their morally imbued goals, those skills also serve as "technologies of self" (Foucault 2000b). Foucault treated "ethics" as a creative and generative process, whereby individuals consciously do ethical "work" through these "technologies" to transform themselves into moral persons within their community. In this situation, successful panga divers do much more than find the lobster, they situate and come to experience themselves as independent, capable, and knowledgable in a community where people are striving to work for themselves. CI divers and their captains carefully record their navigations and activities in dive-logs, and come to know the ecology in very unique ways. Because they work under the sea, they gain first hand-knowledge, for example, of which areas have dead or dying reefs, and assess undersea currents that sometimes indicate lobster migrations, etc. This kind of information is valuable and can be shared in ways that can earn

divers social capital among different kinds of lobsterers on the Island. Divers thus come to effectively control capital, social and material, through processes of enskillment, and this is respected and valued among the majority of community members on the Island. If they find the lobster consistently, they may come to own their pangas, motors, and technologies needed for the job. They might even invest in the equipment needed to transition into trapping lobster, or trap and dive for lobster until they can transition completely into trapping. During the four-month "veda"—the off-season for lobstering—trappers and dive pangas must transition to "fishin fish" to earn cash. In this time of the year, the distinctions between divers and trappers become much less apparent, as everyone is simply attempting to navigate their pangas to the fish. Collaboration across the boundaries that usually separate lobsterers can be advantageous.

Successful divers can also be seen publicly participating in the local cash economy when they eat at local restaurants, buy clothing at Island stores, and indulge in local celebrations and festivals. Activities such as sharing lobstering information, working independently, accumulating capital, committing to the local cash economy, attending Island schools and churches, and publicly consuming local goods and services, in addition to consistently finding the lobster and caring for themselves while doing such a dangerous job, can contribute to their moral standing among Miskitu people and the wider Corn Island community. There are many CI divers who tend to blend-in with the wider community, not only through the activities listed above, but also in the way they dress and perform the local variety of Kriol English. Creole residents may not forget that these men participate in an industry that they vehemently oppose, but may come to see divers as people much like themselves; that is, as responsible and knowledgable men working hard with the resources available to them, so they can take care of themselves and their

families. Corn Island divers who appreciate the local cash economy and the predominant forms of social organization on the Island can experience themselves moving towards the "good life," or at least a better life, that they may feel is not available to them in their home villages (Mattingly 2014). The enskilled body efficiently moving under the sea, actively managing the movements of stiffness, pain, and pressure from the ailing body, and the movement of oneself through various valued forms of social organization on the Island, combine to shape an experience of transition and movement towards larger ethical aims and ways of being in the world (MacIntyre 1981).

From the first days of accompanying divers at sea, I sensed a preparedness, complexity, and foresight in their work that was not mentioned by non-Miskitu others when describing the "diver problem." One of first people I had talked to on the Island about lobster diving was an acopio owner who had recently decided to close his business and try something new with the money he had earned. He described divers as "crazy" men who "don't care" about their own well being. As proof he described how they would arrive to work in the morning in ragged clothing, still smelling of rum and beer from a long night of partying the night before. "They will dive in their underclothes," he explained, "they just don't care." The actions of one particular dive crew I began working with often reminded me of the acopio owner's depictions of lobster divers. The first day I was to accompany them out to sea they showed-up and boarded the panga in what I assumed was some of their best clothing. All three of them were wearing slacks (spotless and pressed with matching leather shoes), brightly colored polo shirts, and new-looking caps featuring the logos of their favorite sport teams. I stood there in my old shorts, faded tee-shirt, and flip-flops, a little bewildered and wondering what they might think of me. We had motored

roughly three miles from the Island when the captain shutdown the outboard motor so the crew could discuss where we might go to find the lobster. As they talked, each of them opened the lid of the five gallon bucket they had brought. The nice clothes came off, were carefully folded, and went into the buckets, and old tattered attire was donned. The lids were then carefully secured to the buckets to assure the nice clothing would stay dry. When we returned to the Island, they went through the same process in reverse. We would cut the motor a few miles from the Island and the crew would use the extra water brought for emergency purposes to shower themselves. The nice clothing would be put back on and we would pull-up to the beachfront acopio with an ice chest full of lobster and looking like we had just come from church. This particular dive panga was exceptionally professional and productive, and they knew there was social and economic advantages in letting people know so. Their dive-logs were lengthy, containing elaborate details of dive sites, and the crew had learned to use the logged information very effectively over the years, identifying patterns that would help them find the lobster. Moreover, the diver was a very proficient and consistent hunter, and by all accounts was good at caring for himself after tough days of diving. The members of this crew embodied many of the positive qualities presented in this section. They had migrated to Corn Island and were thriving; they had no intention of leaving.

The acopio owner mentioned earlier had pointed to the ragged clothing worn by lobster divers with the intension of constructing local divers as backwards, ignorant, and dangerous. His descriptions implicitly compared a generalized "primitive" local diver to the "modern" cert-divers he knew would be familiar to me. But as we have learned in previous chapters, wetsuits and many other technologies are not made available by acopio owners or the larger seafood

companies, and even if the equipment (and training) was available, there is a very good chance that it would not be appropriate for the local forms of undersea navigation. If a wetsuit is not available, why would the type of clothing worn matter? The lobster diver, of course, simply chooses the clothing that is most comfortable for the job, since he cannot use a wetsuit for thermal protection. Dive crews that change their clothing out at sea demonstrate how Miskitu dive crews attend to the perceptions of Others in the community. Dive pangas that earn the respect of Others, and prove themselves to be reliable, can create possibilities for themselves even in a place where most of the people want the diving to end. Trusted divers and panga captains can receive loans from acopio owners to invest in growing their lobstering operations, providing a considerable amount of autonomy in an industry largely controlled by "Spanish" people from the pacific side and generally exploited more efficiently by their Creole neighbors, who own better equipment.

While the section above has pointed out the potential outcomes of panga diving that Miskitu people of Corn Island see as beneficial, the successes alluded to above are not easily attained. In this context of structural violence, small indiscretions and mistakes can have crippling, or even deadly, consequences. I have attempted to illustrate some of the enskilled ways in which these divers navigate their working environment, and how these navigations generate complex ways of attending to and contending with the conditions of their ailing bodies. Lobster divers, however, do not always do what they know is best for them. The pressures and stresses of daily life can move one towards courses of action that severely compromise one's capacity to care for the self. These stresses can stem from obligations to family members and important

others, one's own unanticipated needs, or can manifest from the personal pleasures one pursues to relieve the stresses of daily life.

5.2.2 - The Fragility of Capability and Control

When the "white lobster" arrive on the Caribbean Coast of Nicaragua, the lives of local people change abruptly. There exists two different kinds of white lobster, but they share many characteristics. They both migrate, hold great value, can be exceedingly elusive, and support the regional economy. The white lobster migrating from north to south are spiny lobster, panulirus argus, that have a white tint to them. There is only one species of lobster harvested commercially along the Atlantic Coast of Nicaragua, the spiny lobster, but there is variety in color within the species that can indicate habitat, migration, diet, etc., to regional lobsterers. White lobster from the north usually move south with the "north wind," and are by far the most important "type" of lobster for local trappers. Lobster divers benefit from the arrival of the white lobster from the north, but they may also hunt other types of lobster that do not migrate as readily (reds, greens, and purples, for example) and do not fill up traps as easily. The white lobster migrating from south to north is a different kind altogether. In fact, it is not a lobster species at all, but is the name given to illegal cocaine moving through Nicaraguan waters from Columbia, on its way to the United States. Both kinds of white lobster can improve people's lives dramatically, and in short order, but it is only the kind coming from the south that seems to be inherently destructive.

Everyday a lobsterer goes out to sea, he is hunting for both kinds of white lobster. On a dive panga, the bubble-man stands atop a forward beach seat with the bow line in his hands scanning the surface of the ocean continually for cocaine "packages" as the panga motors

towards a dive site. On several occasions when I was out at sea with panga crews, I would hear the bubble-man yell "something" and then point in the direction of an object floating on the surface. Luckily it was always some form of garbage while I was aboard. The "packages," of coarse, are floating around the Caribbean Sea because they have been ditched by drug runners being pursued by the some form of national or international authority. The lobsterers who work from Corn Island, both trappers and divers, do not consider themselves "drug men," but they do think it would be absurd not to collect a floating package of cocaine and sell it. These packages vary in quantity and quality of cocaine, but can usually be sold for thousands of dollars. A lobsterer can go out to sea on any given day with only a few cordobas in his pocket, and literally come home with thousands of dollars that can sustain his family months or even years (they are paid in U.S. dollars for the drugs). Islanders tell me that a person should be smart when they find a package and invest the money into a business operation that will earn them steady money for years to come. While lobsterers who find packages would admit to being indirectly connected to drug trafficking, they would most likely intensely oppose any accusation of being in the drug business. My data indicates, however, that the lobsterers in this region are most likely critically important to the drug trade. Here is why: (1) when lobsterers find a package or several packages at sea, they nearly always collect them; (2) to decrease their chances of getting caught with the drugs, they attempt to sell the drugs quickly and all at once; (3) because they are selling such a large amount, they usually (and perhaps unknowingly) sell the drugs back to a local representative of the organization that ditched them in the first place; and (4) because the drug organization can still make a large profit even after buying the drugs back, those who actually run the drugs are more likely to ditch them, if there is any indication that they might be pursued

and caught. That is to say, they ditch the drugs knowing that lobsterers nearly always return them.

Some lobsterers who find a package will keep a small amount of the cocaine for themselves to celebrate their new found wealth. The amount of cocaine kept for personal use is usually minuscule compared to the amount they sell back to the drug runners, but it might be enough to binge for several days or weeks, even if they are sharing it. This can put the cocaine into circulation in the community. Several days of binging on cocaine and/or crack cocaine in addition to heavy drinking can lead to serious trouble within families and between community members. The crew of a dive panga were imprisoned on drug charges during the early months of my initial fieldwork on Corn Island. They had found a package and successfully sold it after taking some small cuts from it to keep for themselves. After several days of hard drug use and excessive drinking, some crew members began to suspect the others of swindling an unequal share of money and cocaine for themselves. Accusations quickly spread throughout the community and it was not long before these men were detained and questioned by the local police. In attempts to help themselves, some confessed to the crime, and all involved ended up imprisoned in Bluefields. The interview and conversational data I recorded for this research indicates that it is unusual for CI lobster divers to use illicit or legal drugs while learning to dive for lobster; therefore, the initial enskillment processes do not proceed while under the influence of cocaine, alcohol, or marijuana (I cannot say this is true throughout the Caribbean Coast of Nicaragua). This is not to say that CI lobster divers do not use illicit drugs while diving, and while some might tell you that they know how to dive effectively while under the influence of these drugs, the vast majority will explain that drug use makes it far more difficult to track the

embodied processes described in Chapters Four and Five. If a diver becomes addicted to cocaine, or more likely crack cocaine, he can end up in a very dangerous cycle. He knows he should no dive while under the influence of this illicit drug, but he must dive to earn enough money to support his addiction.

Even when a dive panga is consistently delivering "product," and the diver is generally doing well to care for himself, there are temptations to relieve the discomforts associated with such hard work day after day. In interviews and conversations, panga crew members divulged that approximately sixty to seventy percent of CI lobster divers indulge in illicit drugs and hard drinking occasionally. There are many "good divers" who do not take drugs or drink excessively for several weeks, or months, but then find themselves binging for several days at a time. Such binging will often not end until the diver runs out of money, or until his wife, ex-wife, or girlfriend—or all of them together—physically prevent him from continuing. If the diver runs out of money, he might feel like he has to go back to diving before his body has fully recovered from his exploits to earn some cash. According to CI lobster divers, this is the number one reason why panga divers become injured or die at sea. Interventions executed by wives and girlfriends can be violent and injurious. Nearly all of those men who dive for lobster have children—some of them with more than one woman. When a diver binges, wives and girlfriends watch money that they believe should go to supporting their children, go to waste (see Herlihy 2012). Navigating the Island in narcotic induced befuddlement, divers sometimes forget they now reside on a small island where nearly everything one does is seen and heard. Intoxication fuels not only the spending of money, but also other indiscretions in the way of pursuing interactions with women they just meet. Many women see these intoxicated men as easy targets, and often feel no

shame in taking advantage of their self-induced impairments, as they have most likely had a man in their life that has irresponsibly spent money binging and pursuing other women. Women sometimes have the burden of caring for children, but have few options to earn money. Because Corn Island supports a cash economy centered almost entirely on the production of lobster, there are few jobs available for women, leading to differences in the gendered division of labor when compared to many mainland Miskitu communities. There is no room on the small island for subsistence practices that might supplement the cash incomes of families. Most Miskitu people on the Island rely overwhelmingly on working men to bring cash into their households, and this makes the indiscretions of men highly impactful on the well-being of families. During my fieldwork, I knew of two divers that were hospitalized for injuries inflicted by women in their lives. One was a young productive and respected diver, who was stabbed three times by a pregnant girlfriend after he had binged for several days on rum. The second man was a seasoned diver, who had four women, two ex-wives and two current girlfriends, attack him while he was heavily intoxicated. One of the women hit him hard in head with a pipe, leaving a large a wound and a dent that looked to be permanent. The head injuries he incurred forced him to guit lobster diving altogether.

Some divers just push themselves harder then they know they should, and consequently endure more pain than they can manage. There is, of course, the motivation of monetary success, but there are often emergency situations, where family members, or the diver himself, need immediate cash to remedy a crisis of some sort. Mistakes are magnified within this context of structural violence, adversities can quickly become crises. We also see how *vulnerability* in this context extends beyond the dive practices, to a complex assemblage of obligations and moral

orientations within different forms of social organization. The exceedingly professional panga crew that I mentioned above, for example, was once working extra hard for several weeks to earn some money for the panga captain's uncle, who needed immediate medical attention in Managua. The captain's uncle had been shot in the foot by a friend while hunting, and had lost most of his heel in the accident. The injury had been bandaged at the Corn Island clinic, but there was serious structural damage done to his foot and the local doctors were continually fighting off infections. Island doctors warned that medical treatment offered only in Managua was absolutely necessary, but this would mean somehow paying for transportation and lodging costs, in addition to paying for some of the surgery costs. Remittances sent to family members in their home village on the mainland can also be a financial strain. Every diver I met on Corn Island said they would send cash to their mother when they could. On Corn Island, there is perhaps a greater focus on the nuclear family when compared to mainland Miskitu villages, but this does not mean that extended family members should be ignored and left to fend for themselves. CI lobster divers feel obligations towards their extended families, and affinal relations, and usually offer support when they can. As seen in the narrative about William in Chapter Two, supporting one's extended family can be very beneficial.

5.3 - Discussion: Moving Toward

In the early sections of this chapter, I analyze how CI lobster divers sense and attend to a variety of moving embodied phenomena, and the ways in which these divers ultimately orient towards, experience, and attempt to manage their dive-related illnesses. My argument is that seasoned CI lobster divers who continue to dive for several years are not simply the "lucky" ones

who have not contracted severe cases of decompression sickness. These divers harness complex forms of embodied knowledge to monitor the conditions of their ailing bodies, a form of knowledge grown through the processes of enskillment highlighted in this dissertation. It is important to point out here that there is great variety in the way these processes proceed, and the ways that divers ultimately come to attend-to and perceive the undersea world and their bodily phenomena. In Chapter Four I presented a quote by Robert Desjarlais (2003) that reminded us that we, as researchers or persons, cannot "readily tap into" the lived experiences of another. Like work under the sea, their is always an opaqueness and fragility involved when attempting to navigate and understand the experiential terrain of another. What makes my navigation somewhat unique is my intense focus on the moving and interacting body and its unique emplacements in a world in motion. Before we can "make sense" and conceptualize the world around us, we must first gain a stability from which we can body-forth and engage a material world of others. How we gain that stability through culturally mediated embodied interaction has a profound effect on the ways in which we engage the world around us and come to perceive, experience, and inhabit it. The analyses presented thus far in this dissertation provide descriptions of pervasive patterns that work to structure an embodied experience of the environment and the body. I present outlines of embodied action, but there is always some variation in these practices and each diver's experience of their work and illnesses is unique.

An important goal of this chapter was to demonstrate that despite their enskilled ability to track illness within the body somewhat effectively, contingencies arise in their social world that directly affect their dive practices and their ability to manage their illnesses. The use of drugs and alcohol, enduring commitments and obligations to others, and emergency situations, emerge

from this context of structural violence and directly impact the embodied actions presented in this dissertation. Those divers who can effectively manage not only their dive practices, but also an array of vulnerabilities connected to structural violence and moral orientations within the different forms of social organization they navigate, can experience themselves *moving toward* a better life. I argue that these divers can experience themselves as capable and somewhat in control of their work and futures, but the narrative I present here is not meant to reduce Miskitu lobster divers to persistently rational actors who always efficiently and effectively attend to sensitivities and signs of bodily processes and immediately take the best courses of action to help themselves. That said, many can navigate this very dangerous vocation for years and work can assist them in the way they interact with the larger community of Corn Island and broader sociopolitical world in which they live.

During the fieldwork conducted for this research, the Sandinista government of
Nicaragua was pushing hard to end the lobster diving industry on the Caribbean Coast of
Nicaragua. But each time the industry was scheduled to end, Miskitu people would rise up in
protest and insure its continuation. When government officials would speak publicly about the
dive industry they would discursively construct lobster diving as an example of "mere-suffering"
that served little purpose and therefore needed to end as soon as possible; however, Miskitu
people, the people who actually do the diving, responded to such statements in ways that
constructed lobster diving as "suffering-for" (Throop 2010; see also Levinas 1998). It is not that
Miskitu people necessarily want to perpetuate lobster diving, but without it they loose an
important entry point into the regional cash economy and become far more dependent on the
structure of a seafood industry controlled by others. Lobster divers working out of Bilwi on the

larger dive ships, argue that they will not be able to feed their families if the diving is ended, while CI divers argue that ending lobster diving will destroy all they have worked to build, including their status as independent panga operators. Ending the diving eliminates more than a means of making a living, it assaults a form of moral personhood that has been cultivated through the experience of moving towards a better way of being in the world. The government does understand that they will need to assist Miskitu people in transitioning out of lobster diving by providing resources that will facilitate their participation in the Caribbean seafood industry; however, what the government seems to underestimate, is how important it is for many Miskitu people to feel that they have some control over their participation in this industry. These feelings of control, independence, and autonomy, stem in part from a long history of interactions between the Miskitu people and their Mestizo and Creole neighbors; this history and these feelings become articulated and animated through the working bodies of Miskitu divers in ways that government officials do not seem aware.

NOTES CHAPTER FOUR

¹ The problem with some of these studies is that they use a scientific vernacular to create questionnaires. They do not understand how Miskitu divers refer to phenomena.

² As far as I can determine, this phenomenon is nothing like *Chi*. I'm referring to the movement of air and the resulting feeling of pressure in the body.

³ Much of the way Miskitu divers attend to their ailments aligns very closely with bio-medical explanations of decompression sickness. Compare my outline of oceanic physics in Chapter Three with notions of "heavy water," internal "pressure," and the movements of "the breeze."

CHAPTER 6

SUFFERING AND THE COLLAPSE OF THE LIVED WORLD

So far in this dissertation, much of the focus has been directed at demonstrating how CI lobster divers manage to accomplish such a dangerous job for extended periods of time. All of the of the divers contributing data to this research contend with the symptoms of decompression sickness, even if those symptoms can be somewhat mild, and not considered as "sickness" by some divers. Through processes of enskillment, these divers come to attend to their bodies in distinctive ways that assist them in managing their ailments and protecting themselves from serious "accidents." That said, we must not forget that the rate of serious injury is very high among these divers. I have seen and heard statistics from various sources that estimate the rates of injury and death among these divers, but none seem reliable by my own estimations. Of the thirty-seven seasoned divers I worked with routinely, twenty-eight of them confessed to having a serious accident at some point in their career. 1 Most of them recovered well enough to continue on with lobster diving. Many lived with some minor form of paralysis that was difficult for another to detect, but caused excessive strain and pain for the diver. Nicaragua's standing among other nations of the world, as well as their Caribbean Coast seafood economy, would not benefit from revealing the extent of the problem to the world. Moreover, lobster divers are likely to hide information from unknown "officials," especially those arriving from the Pacific side. There is most likely an underestimation of the problem, and the reasons for this link to the ways in which wide-spread suffering is rendered "invisible" in the current global free-market economy (Farmer 2003, 2004).

Lobster divers literally disappear in this context of commercial labor. They descend for lobster and do not return to the surface, never to to be found or accounted for. The lobster they catch on the day of their death, still goes to the acopio, where it is then sold to one of the Island's large processing plants and then shipped off to the U.S. or Europe, where it eventually finds its way onto somebody's dinner plate. Yes, international consumers eat the actual lobster that a diver brought to the surface as he died! The local structure of the economy, and social organization of industry, contribute to an erasure of suffering in this context. The existence of the acopios work to erase the fact that the lobster diver even exists. Because of the acopio system, the large Nicaraguan seafood processors who work directly with large transnational seafood companies, can say that they do not hire lobster divers. This is true, they only buy lobster from the acopio's, whom they covertly support to keep the lobster steadily coming-in. The acopio owners sometimes even say that they too, do not "hire" lobster divers, even though they purchase the lobster they catch.² Both the large company owners and managers, and the acopio owners and managers, can technically say that Corn Island divers work for themselves. They are free agents, stand-alone workers who choose this dangerous activity in a free-market system. This is the insidious paradox of lobster diving in Caribbean Nicaragua. The lobster divers often move to Corn Island so they can gain some independence and control over their economic practices. The feel they are exploited by "Spanish" captains from the Pacific or Honduras, and choose Corn Island so they might begin their own artisan operations some day. But when they become injured while working, they have no official affiliation or organization to insure that their pain will be acknowledged, that they will be compensated for the brutal work they have contributed to support not just themselves and their families, but to the functioning of this vital regional

industry as a whole. As we will see in this chapter, suffering among paralyzed CI lobster divers is an experience of invisibility, constriction, contraction, and abandonment. It is an experience structured by a particular form of loss connected to the enskilled body and the inability to move across broader vistas of time and space.

6.1 - Dive Accidents

In a vocation where everyone suffers from some pain, and the rate of serious injury is so high, I have often wondered why locals refer to these injuries as "accidents." When I describe the dive profiles and practices of Miskitu lobster divers to medical or scuba professionals, they typically assume immediately that all these divers have very short life expectancies. When I explain further that many in fact, continue their work for ten plus years, they are often dumbfounded. CI lobster divers explain forcefully that they should not have to engage in such dangerous work in order to earn cash and feel like they are moving forward in their lives. At the same time, many will also confess that they did not get into lobster diving because they had absolutely no other alternative. Many of the divers I interviewed said they would not, under any circumstances, go back to small-scale subsistence agricultural in their home villages (if the option was available to them), while others simply said that they had left lobster trapping on the big ships behind them. When I asked CI divers why so many people got injured and killed while diving, they would tell me about the poor economy, lack of education, labor exploitation by ethnic Others, and the dilapidated and insufficient dive equipment offered by seafood companies. These were the reasons they gave for the general problem. Surprisingly, when I asked divers about the reasons for their own injuries, they usually pointed to their own mistakes to explain

what had happened. From at least one point of view, they really did see these as "accidents." I had anticipated that divers would have specific reasons for their accidents, and might attempt to make explain them. There has been an influential line of research in medical anthropology exploring the role of narrative in times of suffering. People of various cultural contexts are often compelled to narratively explore, interrogate, and make sense of their trauma and suffering, as a course towards giving their experience meaning and a coherence in a scheme of pivotal moments, trajectories, and outcomes in their lives (Mattingly 1998; Mattingly and Garro 2000). These divers give very practical reasons for their accidents when they narrate their experience. By pointing out what they did wrong, they demonstrate that they know what is correct; thus, they point to their fallibility, but more importantly, to their own knowledge and capability, even in their suffering—a reminder of the central importance of enskillment in shaping experiences of illness. This chapter examines more closely the reasons behind dive accidents and how enskillment shapes experiences of them.

6.1.1 - Being "Hit" by the Pressure

When divers have an accident, they usually refer to it as "being hit by the pressure." As I point out in the Chapters Four and Five, divers remain (tacitly) aware of bodily conditions as they work. When they feel changes in internal pressure—determined by attending to the movements of phenomena in the body and their indexical significance—the condition of the body is foregrounded in awareness. The diver then monitors his ailments and attempts to manage his ailments. When divers are "hit" by the pressure, this is something altogether different. Being hit by the pressure means you have been surprised by its presence and you are now, without a

doubt, sick, and perhaps even in jeopardy of loosing your life. The abruptness and spontaneous nature of "being hit," is revealed in the way divers explain how it reveals itself. Besides being "hit" they often describe how the pressure will "shock you" or "strike you." "The pressure" is situated as an adversary in many cases. Once it "hits," you are now in a fight for your life.

Making wise decisions and having a good crew can be crucial to your survival. Although being hit is unanticipated—much of the time—that does not mean it does not have origins. Again, lobster divers usually describe their own mistakes when they survive being hit; yet, they also often point to appropriate courses of action after being hit as the reason for their survival. Below is a description of being hit by the pressure by 34 year old seasoned diver named Henry. He describes the dangers of diving in an unfamiliar place with an inexperienced second diver, and how he was able to save his own life.

So, the diving business, its good and bad. [Clint: Yeah. What happened on the day you got hurt? You got paralyzed, right? What happened that day?]. Um, I went fast from this Island. I went about maybe thirty miles. That's far. They said, um, that there was some big rocks, the water, water, was deep. And, you see, Island water is clear, blue, blue, and you see from up [in the panga]. That day, I didn't know that was going to happen to me. Another friend came and was missing the lobster them [not hooking them]. Lobster were running. [Clint: Oh yeah.]. I went, chasing and killing [the lobster] with my um, with my um, hook. I'm killing, and came back. So, this boy [the other diver] is greedy then, he wants, he wants all the lobster. So I was moving fast. And next thing, here is the lobster, the lobster are running. Now, I'm killing the lobster that are running. So that's bad, its ah, deep water, bad to move fast. I didn't know [the environment]. When I come up, when I get in the, um, on the, on the skiff. When I get in the skiff, um, the panga boy, right there sitting down, by the engine. The helper right there. Well I think, I feel, I want to drink

water. So, I want to grab it, but I feel this hand has, gone to sleep [raises his left hand]. And with, with tongue, I cant talk good. [Clint: Oh yeah.]. I want to tell you I'm feeling bad, but I cant talk. I feel bad. I'm talking no sense. Very, very dangerous. So um, I'm feeling I want to lay down. I want to, feel like I want to sleep. I, I want to move my foot, but it doesn't work. Only one working [raises his right leg]. And I want to grab the water and can't grab it. I have to turn around with this [other hand] and grab the water. I twist off the cover and I drink. I'm feeing, I um, I'm seeing, like colors, yellow, green, I, I see the daylight [squints his eyes as if it was bright]. And I feel I was bad. I done get sick. My mind tells me, I must go back down [under the sea]. I get one full tank. I tell my friend, I feel bad, get one tank, full, full, and take it out. I can't move, so you and him are going to hold me on this side and take me out from the skiff. Um, you tie the back strap, you tie it for me, and they are holding me then. They are holding me from the skiff, and so, I feel bad man, want to vomit, I want, I want to be dead. This thing [points to throat and chest], very, very asleep [numb]. [Squeezes skin on left arm] No feel nothing. Alright then, well I'm coming down again [descending]. I'm coming down, I'm coming down, with one hand, and one foot, this is asleep [one side of his body is paralyzed], Im going with one side then. Same like a plane, one of the engines out. [Clint: Yeah.]. Only one working [Clint: Yeah.], one, one side. I've got the regulator in the mouth. Going down...

....If you get afraid, if you are afraid, you lay down on the skiff and you are paralyzed. You get sick from the bottom of the sea, the same sea will take out the pressure. The same thing, you must give it a chance to, it will turn your, it will turn your body, [when] you get paralyzed with pressure. If it goes into the bone it stays. Understand? [Clint: Yeah.]. From the meat, it goes into the bone, and [you are] done, you can't walk. [Clint: Yeah. So you were...]. You are pissing, you are shitting, you don't feel it. And you can't move. Can't sit down, cant walk. So well I gone down, I gone down [descend]. [??] Im feeling it in the bone and then I'm crying! But Im going down, takin out the pressure then. Then half way to the sea bottom, from, from top half way, I see, I see the skiff then, I go down

and, I'm watching the skiff [???]. I move my hands [gestures with both hands]. Swimming about, swimming about, moving, exercising. [Clint: Uh, huh.]. My foot, and I feel my hand work again. [Clint: Starting to come back?]. Yeah. So I, I started to feel strong. I gone down, come back up, but when I want come back up, I feel it again and cry. I cry. Pain, like, like something strike me right there [gesturing to neck], like, like a knife is striking on my bone, crying, but to save your life you have to do that! Come on back, up and back, and so that, use the tank until it is empty. Then you tell them to give you another tank. You have to use four tanks. Take out the pressure....

...When you go down, you get that pressure out. Alright. I saved my life that day. When I come out, close by the skiff, my eyes, water running [crying]. Pain all over my body then, all on my body then, what, what was asleep, was now working again. The, the pressure, was coming back out, yeah. You understand. [Clint: Oh, okay.]. So, it hurt! Yes, hit you right to your bone, you have to take that pressure out. [Clint: Uh huh.]. Then I get um, feel ah, if you are afraid, you come and lay down on the skiff, and then you are paralyzed. [Clint: Ah, so you have to stay awake, you have to try to make it better.]. Yeah, you take another tank, full, full, and take out the pressure.³

Like so many other Corn Island lobster divers, he places at least some of the blame on himself. He trusts his crew and goes far from the Island to an unfamiliar dive location that has "big rocks." He sees that the water has a different color, but does not realize right away that the abnormal color is disrupting his ability to discern the depth. He finds himself in deep-water, so to speak, with an inexperienced younger diver who does not know how to hook the lobster without scarring them away. Henry chases the running lobster and finds himself swimming faster than he should in consideration of the extreme depth. Henry navigated the environment in a way he

knows is dangerous and did not enact his embed skills through proper emplacements of his body. He let the young diver, and the amount of lobster present, distract him, and did not determine that the water was "heavy." When he surfaced, he began to feel the pressure take effect on his body. What is frightening about being hit by the pressure, is that it takes from divers what they value most in an instant, their ability to feel movement of phenomena within the body so they can discern its condition. The body goes numb—"asleep," as Henry puts it—and the diver no longer has *control* over it or himself (or very little control). The first reaction is to stay still, to rest, to lay down, since the body is not functioning properly; but Henry tells us this would be a very big mistake. Henry has not been trained in decompression theory, he does not have a "divetable" that could calculate how far he should descend and for how long, in order to let the nitrogen slowly escape from his body. What he does know, is that he must regain the movement of his body in order to evaluate the movement of the pressure in his body. So Henry has his crew put him back into the water, even though half of his body is paralyzed, and he descends until he can begin to move. He then can monitor the pressure moving from the core of the body, to the extremities, or outer layers of the body. Henry says if the pressure sets into the bone, it will stay there, and you will become permanently paralyzed. Much like the "infection" of coldness, presented in Chapter Five, once foreign phenomena become embedded within the body, it can be very, very, difficult, or sometimes impossible, to get them moving again. His statements reveal where his theory of dive-related illness differs from decompression theory. He is not abstractly tracking the release of nitrogen bubbles at a certain depth; rather, he is tracking the movements of pain and numbness (and/or paralysis). The pain circulates through the body, but it also moves inward and outward as the body moves through the environment. When he gets close to the

surface, he feels the pain move deep into his body, like it is stabbing him in the bone, so he descends again despite the fact that his limbs have regained movement. Just like those early days of the undersea enskillment process, the diver's goal, when he is hit by the pressure, it to keep the environment from collapsing inward. One must be able to body-forth and extend outwards sensorily, into the environment, in order for it to open-up and become inhabitable; however, in the case of being hit by the pressure, it is the top-side world that has become uninhabitable and is closing-in on the diver. Whereas so many other people having this kind of illness experience would *not* consider retreating back into the water, where the damage was done, the CI lobster divers "knows" that the undersea world is still inhabitable to him, and it will help him slowly transition into the top-side world; it is the place where he will regain his enskilled self.

When the pressure hits you, and you become disoriented and cannot functionally attend to the surrounding world, it becomes a foreign place, as does the body itself. Henry, for example, says later in his narrative, that he begins to see his crew as enemies. "You can see, but what you see is a lie. You see different colors. Yeah, and I see you, and, can see you, but you, you are my enemy! You, I leave you. [I'm] crazy, crazy, I want to leave you." Many divers experience being hit by the pressure as going "crazy." They become dizzy and confused. They loose their sense of place and feel like they are slowly moving outside themselves, or that they are leaving their bodies. Even when the body is still moving, it can feel like it is moving very differently. The sedimentation of one's embodied knowledge seems to have been disturbed, and the way the body feels as it moves, makes it feel foreign. Many divers say their tongue feels heavy after they get hit, it does not move as it should. They can speak, but cannot speak as themselves. As divers experience this loss of the body, many feel the need to fight, to get it back, despite the fact that

they feel so weak and tired. It is as if the pressure has moved into the core and is pushing one's spirit out (see Garcia 1996). Hugo, introduced in Chapter Two, once told me that when he was hit by the pressure, he felt his sprit leave him. For Miskitu divers, there is a certain kind of permeability of the body, whereby phenomena, including coldness and pressure, or even one's spirit, can move inward towards the core, or outwards into the environment (see Csordas 1994a). Many people who have written about the lobster diving problem in Nicaragua have focused on the lack of professional training, and the exotic "beliefs" that Miskitu divers embrace in-stead of scientific knowledge of decompression sickness. Such writings often refer to *Liwa Mairin*, the malevolent mermaid of the sea that *inhabits* and/or kills Miskitu divers for disturbing, or taking from, her undersea world (see Parent 2001; Herlihy 2012; Jamieson 2002).

What these portrayals usually miss, is the fact that divers generally *do* understand the basics of nitrogen accumulation, and the need for it to be released by carefully manipulating ambient pressure. How then do these two "explanatory models" co-exist? Anthropologists have offered symbolic explanations regarding *Liwa Mairin*, and her kind—sometimes called *satans*—that demonstrate the ways in which *satans* come to represent economic and social relationships in Miskitu communities (see Dennis 2004; Jamieson 2002; Garcia 1996).⁴ For example, the *satans* sometimes attack those who over-harvest natural resources and foraged food sources, and therefore serve as an important symbolic representation of the need for sustainability and food-sharing in Miskitu communities. But we should ask, what is the embodied experience of confronting *Liwa Mairin*? The perspective on embodied experience outlined above can add something to these symbolic explanations. When divers speak of *Liwa Mairin*, they usually describe a process where they come to feel like they are intruding into a foreign undersea place

that they should not, and cannot, *inhabit*. Confronting *Liwa Mairin* under the sea is a case of embodied disorientation that can result in feeling afraid, and those who feel fear are far more susceptible to her wrath. Those who can *control* their fear, and regain their enskilled orientation under the sea, free themselves of her. This "satan" conjures, and is conjured by, a breakdown in the enskilled body and the diver's inability to *inhabit* the undersea world in such a way that it takes on "for-me" qualities. A diver must regain his embodied stability, so he may extend sensorily, and body-forth into the environment. When the enskilled body breaks down, the ocean becomes something else, and for someone/thing else.

Does *Liwa Mairin* bring on "decompression sickness," or does she use magic, or some other kind of malevolent power, that mimics the symptoms of decompression sickness? Neither of these explanations would properly account for the power and experience of her presence. She is an aspect of the sentient undersea ecology, and therefore her presence necessarily affects the phenomena associated with navigating the undersea world, including the presence of pressure. She might attempt to move, along with the pressure, into the permeable body, and necessarily affect the movements, configurations, and character of other embodied phenomena. Dive-related illnesses need not be excessively attributed to "the pressure" or *Liwa Mairin*, they are of the same place and interrelated. Corn Island lobster divers have explained that one should not get an "injection" from a medical doctor after he has been hit by the pressure. It seems that phenomena embedded deeply within the body, wether it be pressure, coldness, *Liwa Mairin*, or traces of all three, will only further contract towards the core if the needle penetrates the body. This contraction usually results in paralysis.

6.1.2 - Embodying Control and Controlling Fear

In Chapter Five, I pointed out the potential indulgences and the many socio-economic stresses that can disrupt one's enskilled ability to navigate their work effectively. These included the excessive uses of illicit drugs and/or alcohol, compounded with the needs of the family, and management of unexpected crises when they arise. Fear is another very important factor that can disrupt one's enskilled abilities to navigate their work and ailments. These men will tell you that you cannot be a lobster diver if you are afraid. If you dive with fear, they say, you will certainly end up dead. Because the job is so dangerous, and the sea is so unpredictable, divers must take steps to manage their fear on a daily basis. These steps begin before the diver even gets to the acopio to load-up the panga for a day of lobster diving.

When a diver wakes in the morning and begins preparing for a day at sea, he should make sure that he does not feel tired, uneasy, or fearful. It is important to feel peaceful and steady before going out to sea. Most divers will begin their day with praying, to provide for themselves a sense of quietude. Some will sing Christian songs with friends and family members before they leave for the acopio to remind themselves of their purpose. Quelling the fear, of course, does not mean one should extinguish his sense of caution. As Aristotle (1985) argued, "courage" is a way of confronting situations as one should, being fearful of the right things, and not of the wrong things, at the appropriate moments. For the seasoned lobster diver, their work should not entail fear, because despite it dangers, it is considered navigable with the correct temperament and skills. Aristotle would say that this orientation becomes a virtue as one moves towards the "mean" of fear as understood within the community (1985; see also Mattingly 2014). A dangerous lobster diver is also a morally corrupt diver; one who does not proceed with their

work correctly and disregards what is at stake when one enters the watery world. In daily interactions, dive panga crews usually refer to this in terms of softness and hardness. "Hard divers," have hard bodies and demonstrate this consistently, but this is not just because they are "tougher,"—though toughness is always relevant—but because they know how to care for themselves and navigate their work skillfully. "Hard divers" make wise decisions when emergencies arrive. Parts of Henry's narrative serve as good examples of the kind of "hardness" I am speaking of here .

Pain all over my body then, all on my body then, what, what was asleep, was now working again. The, the pressure, was coming back out, yeah. You understand? [Clint: Oh, okay.]. So, it hurt! Yes, hit you right to your bone, you have to take that pressure out. [Clint: Uh Huh.]. Then I get um, feel ah, if you are afraid, you come and lay down on the skiff, and then you are paralyzed. [Clint: Ah, so you have to stay awake, you have to try to make it better.]. Yeah, you take another tank, full, full, and take out the pressure.

Henry was sure to point out in this narrative that he saved his own life that day. This happened because he took the correct courses of action despite overwhelming adversities. He did not succumb to fear and panic, and proved himself to be a hard diver *at the right moment and in the right situation*. Corn Island lobster divers often construct important forms of moral discourse with evaluations of the mind, body, or actions as appropriately, or inappropriately, *hard* or *soft*. Both Alonso and Hugo speak of certain men being inappropriately "hard" in Chapter Two. These morally charged evaluations are usually directed towards the actions of individuals in context, as both hardness and softness can index positive and negative qualities of an individual; that is,

there are times when one should demonstrate a hardness, and times when a softness is more fitting. Based on the scope of my own research pursuits and currently published accounts of Miskitu culture, I cannot assume that these notions of hardness and softness articulate similarly across most Miskitu villages along the Coast. It does, however, make sense that these terms are used often when speaking about dive-related illnesses and "being afraid" in this context of lobster diving. Evaluating the quality and *movement* of hardness and softness (or the amount of stiffness) in the body relative to dive activities is a vitally important component of determining the status of ailments and bodily conditions among Corn Island divers. Below I briefly explore how these terms orient divers towards mind, body, personhood, and self, and how they take on a moral valence.

Many lobster would speak of the harness and/or softness of the mind when evaluating Others. One day while recording data at sea with a Corn Island lobster diving crew, I lower my video camera to my lap and decide to ask a few playful questions of the resting diver. "Do you guys speak English out here when I'm not with you?, I ask. "No [three second pause], we speak Kriol, Kriol English!," the diver says as the crew erupts into laughter. "What about Miskitu?," I continue. "We speak Miskitu for you. Now we only speak American," he says jokingly amidst continued laughter. I offer a third question in a slightly more serious tone, "Why is it Miskitu people are the only people who speak all three languages on the Island?" The diver, still amused, responds with a mischievous smile, "We Miskitu people are smarter. You see how we listen and just thief your language? We got soft minds, our brains, we can listen and just learn that." In spite of the humor involved here, his response to this question is indicative of the stance taken-up by many other Miskitu informants on the Island. In most responses to this question, however, it was

the negative qualities of excessive hardness that were assigned to the Other—the Creole population and/or the "Spanish" (Mestizo) people on the Island were said to have "hard heads" that prevent them from acquiring a second or third language (see Minks 2013). Divers often evoked the notion of the hard or soft "mind" when speaking of unskilled lobster divers, stating that many lobster divers become injured because they do not have "good minds" for the job; their heads, or minds, being too soft to follow their own guidelines routinely, or too hard to respond appropriately to changing environmental and bodily conditions. It is this inappropriate orientation towards things and actions that is deemed representative of being unskilled. The unskilled diver has not found Aristotle's (1985) "mean," and is likely to succumb to fear, panic, or overzealousness, and suffer an accident.

Hardness and/or softness is also evoked to refer to the materiality of the body itself. In Chapter Five, I presented an analysis of the enskilled ways in which divers sense stiffness (hardness) and motility (softness) of the body as a technique for monitoring the ailments and the movements of illness within the body. Here, I'm referring to diver evaluations of one's overall bodily condition. "Soft divers" are those divers with bodies that prematurely fail them physically because they are not strong enough to endure the "brutal" conditions and activities encountered in daily navigations of the undersea world. Physical appearance can sometimes indicate a softness such as this, but usually the evaluation is based on one's performance at sea. Seasoned divers earn respect among their peers when they can find the lobster consistently, week after week, with an ability to endure the continued hardships associated with the work. One who has a hardness of the body still needs to be very careful during dive activities with skillful evaluations of their weaknesses and strengths, and accurate assessments of their ailments. A "hard man."

even one with a well conditioned body, can display a dangerous stubbornness or inattentiveness and misestimate his abilities at his own peril.

People are sometimes also referred to as excessively, or appropriately, hard and/or soft, and many divers certainly orient towards the self in this way. I worked closely with a diver who was widely recognized among his peers as the best lobster diver on the Island. His work practices were unique in that he rarely took a day off to rest his body. Six days a week, eight hours a day, he spent at out at sea, diving for lobster for the entirety of the eight month lobster season. Other divers openly admired his vigor, seafaring knowledge, and perhaps most of all, his tenacity. He drank alcohol conservatively, did not do illicit drugs, and proved to be a savvy investor and saver of the money he earned. One day while eating lunch, to my surprise, his brother-in-law insisted that despite these good qualities, the island's best diver was in fact a very dangerous man. When I asked why he was dangerous, the brother-in-law explained that he was "a hard man, a very, very hard man. And that's bad. Bad, bad, bad, bad." With further questioning I came to understand this form of hardness as being related to the talented diver's insistence on unilateral control of panga operations and an overzealousness in regard to his personal successes, monetary earnings, and his insistence on a rigid unchanging structure in work practices. From the brother-in-law's perspective, his sister's husband certainly proved himself to have those beneficial "soft" qualities of mind, and the indispensable "hard" qualities of body, but his intense focus, unwillingness to adapt to specific circumstances, and unvielding pursuit of success made for a stable but dangerous disposition that could cloud his better judgment and enskilled abilities, potentially placing him and others in danger. From the talented diver's perspective, other lobster divers were less successful than him mostly because they lacked foresight, ambition, self-control, and discipline.

The brief examples above demonstrate that notions of softness and hardness are not isolated qualities understood as essentially good or bad in-and-of-themselves. These qualities should simultaneously exist for an individual and each should be foregrounded or backgrounded appropriately in the mist of (inter)action. They are qualities associated with successes and failures because they are qualities that can assist or hinder one's navigations of a social and material world. It is the ability to appropriately demonstrate hardness or softness in context that reveals morally relevant qualities of character. Softness is generally associated with an ability to be flexible and adaptable, qualities linked to a history of economic practices and the importance of mobility highlighted in Chapter Two. Many divers explained how Miskitu people embody the unique ability—among the Coast's other ethnic groups—to preform a broad repertoire of languages and skills (cf. Geurts 2005; Kroskrity 1993; Minks 2006a, 2006b, 2007, 2008, 2013). As we explored in Chapter Two, these attributes allow them to move about the Coast effectively and "do any kind of work." This is not to say that excessive flexibility is always perceived as a good thing in every situation. Hardness is a quality associated with endurance and rigidity and can be as beneficial or detrimental as softness. There are times when these men need to endure especially harsh conditions to keep their jobs, or maintain a strict routine of practices to promote safety and long-term success in an endeavor. One must know when and to what degree to foreground or background a hardness or softness of mind, body, or self. These qualities can only be evaluated as "good" or "bad" as they are performed in a moment of interaction, the performance being deemed a fitting or unfitting example of one or the other quality. This

emphasis on appropriately monitoring performance points to the importance of "presence" when lobster diving—the (sometimes tacit) ability to situate one's self effectively within the moment by orienting the attuned body in such a way that one can appropriately attend to one's actions, bodily processes, and the surrounding environment in such a way that one can *skillfully* navigate this dangerous job. As demonstrated above, divers often described the mind and the body as distinctive phenomena in their narratives, but this is not necessarily evidence that Miskitu conceptualizations of mind and body align with the basic tenets of Cartesian dualism so prevalent in "Western" civilization. Lobster divers usually evoked the notion of "mind," in Kriol English, when they were speaking about the importance of maintaining a certain kind of awareness of, or attentiveness towards, bodily and environmental conditions while diving. Most of the time, however, lobster divers spoke about "feeling" their way through the process of diving in forms of discourse that tied perceiving, thinking, and emotions to embodied action within a sentient ecology, rather than to the autonomous mind.

6.2 - Paralysis

When divers are hit by the pressure, the first thing they try to do, if they are able, is reverse the effects by reentering the water and descending to a depth where they can manage their illness symptoms. But when divers finally give-up on trying to release the pressure from their bodies, they are left with two options. They can race for the Island in the panga to find a bed and a local doctor, or, they can point the panga towards Bilwi, the capital of the North Autonomous Caribbean Coast, where the only hyperbaric chamber is located. Bio-medical professionals consider hyperbaric chambers the only effective means for treating a serious case

of DCS. The chamber recreates the pressure encountered undersea and then slowly decreases the pressure, so nitrogen can escape the body. CI divers realize that making it to the chamber as quickly as possible can mean the difference between losing all mobility and regaining the functionality of all their limbs. On any given day, however, Bilwi can be between one hundred and one hundred-fifty miles away from the dive site where the diver is injured. The panga must carry extra fuel to execute to such a journey, and there can be no doubt among the crew that there is enough fuel, or the panga might be left adrift at sea. The diver must also have money on hand to pay for the treatments in the chamber. It seems the cost of treatment, and the procedures surrounding treatment, have been unclear to CI divers in the past.⁵ The hospital where the chamber is located says they will treat divers needing immediate attention regardless of one's inability to pay for treatments in advance, but Corn Island divers say that these treatments end sooner than they should because of they cannot afford them. Because most of the dive ships owed by large companies sail out of Bilwi, lobster divers injured on these ships usually get their treatments reimbursed by those companies; but this is not the case with injured Corn Island divers. Again, we see how the personal autonomy gained as a Corn Island panga diver can be simultaneously beneficial and dangerous.

The long panga ride to the chamber can be excruciating for a suffering diver who has been hit by the pressure. As his body constricts with intense pain, stiffens, hardens, and goes to "sleep," he also is being tossed around violently by a racing panga that is leaping through the swells. Once the diver makes it to the chamber, the treatment will begin immediately. This means lying down in the chamber while inhaling oxygen and letting the chamber do the work of recompression and decompression. Some divers arrive to the chamber unconscious, and awake

as they are receiving treatment in the chamber. One diver told me that he awoke in the chamber, and in his disorientation, thought that he had been buried alive. He began flailing and screaming until he saw the face of the doctor looking at him through the small port hole of the chamber (nurses do sometimes accompany patients as they use the chamber). As the diver lies paralyzed and receiving treatment, he hopes, or prays, that he will soon start to regain feeling in his body.



Corn Island divers usually do not have their family present while they are receiving treatment, and this can bring about troubling feelings of severe isolation while in the enclosure of the chamber (see Fig. 6.2a). After treatment, the patient should receive some

physical therapy to promote a rehabilitation of the disabled areas of the body, but CI divers have told me that therapy is not always offered, or is minimal. When a paralyzed Corn Island diver returns to the Island, he must immediately assess how he can get back to work to pay for the many expenses that were accumulated as he received treatment. Many divers find themselves barely able to walk, but feel they may regain some of their abilities with continued effort. They do their own forms of therapy, which may include walking, swimming, or getting massages from family members to help with blood circulation. If a diver can regain a good portion of his mobility, he will try to buy a GPS and put his dive-log to work as the captain of a dive panga. The new job will mean making substantially less money, but at least he will be able to bring

some money into his household. Some divers, however, suffer from paralysis so severe that they cannot work. Others can walk sufficiently, but experience extreme internal pains that do not allow them to work. For the Miskitu husband and father who is unable to work, life can be very, very, difficult.

6.2.1 - A Social and Material World Collapsing

You will find many divers who suffer from debilitating forms of paralysis lying on their porches in a hammock. They can barely move themselves, or cannot move without the help of friends and family; but every once on while they must be moved to avoid bed sores. Divers in this situation must depend on their families to take care of them for the rest of their lives. Even if the immobile diver is being cared for in the home, he can feel intense feelings of abandonment and invisibility. Because he is no longer bringing money into the household, there can be enormous financial strain, but the household must find ways to carry on. Divers who can no longer support their families often loose their voice in family affairs, as other family members take over various responsibilities in the home. When I interviewed Corn Island divers who were restricted to hammocks on their porches, they usually had very little to say. Most of them would stare into the distance with blank expressions as I asked questions, and would then reply with one or two-word answers. A diver who is paralyzed, will worry that his wife may leave him, and that another man might appear to care for his children as their step-father. When a paralyzed diver looses his wife and children, it can be experienced as a blessing and a curse. Divers have told me in exceedingly matter-of-fact tones of voice, that of course their wife found another man to care for them, the children need to eat.

Divers like Hugo, introduced in Chapter Two, gain enough mobility to slowly get around the Island by foot, but cannot work because of their paralysis and internal injuries. In the hot midday sun, I would often see Hugo struggling slowly down the paths and streets of Corn Island, attempting to find a way to provide a little something for his wife and six children. He would regularly, for example, visit the churches of the Island and ask the pastors if any small amount of work was available, or ask if donations of food and clothing had arrived for distribution in the community. He would also go to the acopios and ask for small donations. His fellow divers would contribute nominal amounts of money to his family during the first year following the accident, but they eventually stopped giving. Much of Hugo's left leg was paralyzed, and he had to swing it around to the side to get it out in front of him as he walked. He would fall down regularly while navigating the unstable dirt paths of Corn Island and sustain small abrasions on his arms. It seemed he always had scrapes and bandages all over his arms. He was determined to better his situation, and not be rendered invisible, but he could not stop his life from continually shrinking. As mentioned in Chapter Two, he had lost his large house—that he had bought for his in-laws—and then lost all but one small room of the house he had built for his immediate family. Eventually, he had sold most everything he could in his house, the make-shift beds, the table, the plastic chairs, the pots and pans, and even the small gas stove. There was only the wooden floor, a pile of blankets in one corner, a small pile of clothing in another. Following his first accident he had been unsuccessful in his attempt to start a lobster diver co-op that would be funded by the Nicaraguan government. He had failed because he did not have the education to complete the proper paper work or the ability organize people effectively. Another important reason why he could not accomplish these things was because of his constrained mobility on the Island. He

could not get to where he needed to be in a timely manner, and had problems tracking down people who said they would assist him. After his second accident, he found it very difficult to even leave his home due to his poor health. He would sleep long hours and felt intensely sick much of the time when he was awake. He slowly became nearly confined to his one-room home, which had shrunk to almost nothing. His wife was leaving their children with her parents, who had only slightly better living conditions. Occasionally, he would make it to the Island's health clinic in attempts to help himself, but the doctors would only prescribe him medicine he could not afford. Hugo's suffering was so much more than the physical maladies with which he was forced to contend. For him, the suffering was about the collapse of his social and material world, the way it was shrinking, and his isolation. When I came to visit him, he spoke continually about his isolation and invisibility. His words echoed the many narratives I had recorded from other paralyzed divers, such as those presented below from a diver named Horvin.

Therefore, I say that there is no one that visits me. Not my friends the divers, nor my friends the businessmen, nor my friends the co-opers. But you foreigners from another nation that arrive to look, to investigate in my life the suffering that I have...

...It is as if, look I am alive and the business and the coops know when I am bringing the lobsters. They knew me. When I am sick they do not know me. And they do not help me. And worse, when I am dead no one is able to come to help my, ahhh, my wife. A hundred pesos, a hundred cordobas or fifty cordobas in order to buy food for my children, for the children of the name of the deceased "Horvin." No one is going to remember....

...Therefore, I only have in my mind [to be] with God because no one is going to help me. Yes, no one is going to help me. Because the business men who know me here, do not help me, like they do not know me, that I was a producer of lobster, that I was bringing the lobster.⁷

When Henry spoke about his dive accident, he articulated many of the same concerns and also stressed the isolation he felt immediately after he was injured.

When I come out, then, you see that time the diving business did not have laws. The panga boy, his name Chorizo, he lives down yonder, he did not come and see me. They bring me to the house, and just throw me then. And he did not go and tell, the, the, company. [Clint: Yeah.]. He did not tell him. When the thing [the accident] happened right there [nearby]. You understand? [Clint: Wow.]. It was like I came and I was dead, dead already. You understand? [Clint: Wow, wow.]. In this time no one was making um, seguro [health insurance] business. That time, that time, nothing. So well you see. [Clint: So he just, he just left you like you were dead already?]. Ahh huh. The, the panga man, he didn't tell, he didn't tell the boss man. The man he worked for. He didn't tell him that his diver got sick. Didn't tell him. He took the lobster [to the acopio] and went home. Yeah, and so he left me, and there was nothing I could do.⁸

Divers like Hugo and Henry, who continued to suffer from paralysis, felt like their lives no longer had value when they were no longer able to deliver product. They came to experience the Island environment as closing-in upon them, their lives contracting inward. It had become disorienting and an almost impossible place to navigate. Corn Island created possibilities for the self to experience expansion, possibilities, and independence, but it could also confine and

isolate a Miskitu diver unlike other places. It was not prudent for either Hugo, nor Henry, to return to the places where they were born. Their families did not disown, or dislike them, but there was no position for them in their original "place." Nor did they receive assistance from extended family in their home villages. If Hugo had sent remittences to his home village, he would have remained present in his absence, and would have assured his place within his family affairs there. But he had cut ties to his home village and had focused on his affines as a way of establishing himself as a good husband to his wife and his Miskitu Corn Island neighbors. The experiences of illness and suffering for Hugo and Henry point to the loss of one's ability to bodyforth into the world and project towards "for me" phenomena. Their enskilled bodies were diminished and had become unpredictable, leaving them in states of chronic disorientation. Their bodies were continually contracting, along with the rest of their social and material worlds, leaving them isolated and rendering them mostly invisible. Their physical and social immobility stifled their sense of self and profoundly corrupted their experiences of moral becoming.

6.2.2 - Bodying-Forth Through Paralysis

When those paralyzed divers who have been rendered invisible can muster enough energy to "fight," they sometimes choose to do something extraordinary to combat the shrinking of their world; they get back into the water and resume lobster diving with their now-crippled bodies. In a stroke of cruel irony, the weightlessness experienced under the sea, can actually promote a much greater range of movement for partially paralyzed divers, permitting them to return to the work that nearly killed them. Divers returning to this work after becoming paralyzed often experience an immensely troubling form of ambivalence. As they begin diving again, they

must work extra hard to control their fear—which they believe will kill them—while entering into an environment where they almost lost their life. Their bodies move and feel different, they cannot trust their embodied knowledge to tacitly guide their work practices. Their intensely foregrounded attention to the details of their movements and work practices slows them down—in addition to sluggish movements of their limbs—and fosters feelings of discontinuity and foreignness. They are clumsy, not simply because their bodies suffer from partial paralysis, but because they must restart enskillment processes with a body that demands a different point of departure in order to reintegrate into the sentient ecology of the undersea world. In time, through processes of enskillment, some divers begin to feel in control of their bodies and experience a reawakening of their capable self. Once again they are able to experience themselves as orienting towards possibilities and better futures. The world "opens-up" for them as they capably extent into it. A seasoned diver named Chino, described this phenomenon in an interview.

After the accident I was just in my house, laying on my bed. Nothing to do. Nothing to do. Couldn't work, and never, never, I couldn't move good, I was just here. So, I started the diving again, went slow, slow, slow. I didn't want to go deep, so stayed close, close. I keep on diving then, my body started to feel a little bit better. I started to feel more strong, I was exercising my body, moving my body, it started to feel better in the water. [Clint: Do you feel good when you dive now?]. Alright, now when I dive, now, I feel like a fish, like a fish. Feel good, good, man. Now I'm working everyday, making product. You see, see that is when they want you to go away [stop diving], find a different [kind of] work. No work, no work, just the diving when you are crippled.9

Chino was able to restart his work as a diver and felt he was benefiting from it. He was a seasoned diver with a thick dive-log that would help him find the lobster. He said that he depended more on his dive-log than before the accident, because he usually burned (emptied/used) seven or eight tanks per day now. From the beginning, the weightlessness that he experienced under the sea facilitated a much better range of movement in his partially paralyzed limbs, but he also felt that diving everyday was a form of therapy. The overall use of his limbs improved as he continued diving and this made his navigation of the Island much easier. According to Chino, the people in his Miskitu community stopped looking upon him as "crippled," when they saw that he was able to provide for his family. Most importantly, he was not discarded and was able to prevent becoming invisible in his social world.

Not all lobster divers suffering from paralysis can get back into the water. If one takes a serious hit by the pressure, paralysis is sometimes accompanied by internal damage to tissues, organs, and nerves. Hugo, for example, regularly felt internal pain. He had difficulties urinating, and suffered from intense headaches. He told me that anytime he descended below the surface of the sea, the pain that he normally felt was immediately magnified. After his first dive accident, he decided to try diving again and immediately felt pain as he began his work. It was not long before he was hit by the pressure a second time; most likely because of the injuries incurred during his first accident. Others who have been "hit" claim that they might be able to start diving again, but not before they are able to contend with the fear. If they are unable to control their fear, they will most likely never return to lobster diving. Even if they want to, dive panga crews can sense when divers are afraid, and will not want to work with them for worry that they will injure themselves. Andre, the diver presented in the Introduction, had a slight limp due to a dive

accident, and suffered from no internal pain. He said that working undersea improved the mobility of his leg, but the leg would grow tired towards the end of a day of diving. When he would return home after a day of work the partially paralyzed leg, and the corresponding hip, would ache and sometimes hurt him well into the night. Like Chino, Andre also felt that returning to lobster diving had improved the condition of his paralyzed leg, but unlike Chino, he also knew that he would have to live with a more intense form of pain on a daily basis if he was going to continue in the diving business.

These kinds of circumstances are reminders of where statistics fail to provide accurate insights regarding this industry. All but a few of the Corn Island divers I interviewed estimated that fifty to sixty percent of lobster divers are "hit by the pressure" at some point in their careers. Just to clarify, all CI lobster divers—based on my data—suffer from symptoms of decompression sickness on a daily basis, but the CI divers themselves say that fifty to sixty percent of lobster divers suffer a dive accident at some point. Many of those suffering an accident, however, recover to the point that it is difficult to see their injuries publicly. Some of them continue with diving with no increase in pain as they preform their job. Other times there is a slight increase in pain, or a potent form of pain towards the end of the day. If you look very closely at successful seasoned lobster divers on Corn Island, its not uncommon to see a slight limp, especially if you see them in the evenings following a long day of work. As mentioned earlier, when they tell you of their accidents, they often point to their own mistakes, and this is one reason why they eventually choose to continue with lobster diving. Some go back out of economic desperation, while others really do feel capable of navigating the inherent precarity of this kind of work. For those experiencing isolation and the foreclosure of possibilities in their lives because of their

injuries, returning to diving can be a way of rehabilitating the enskilled body—even if it is partially paralyzed—and thus refashioning the capable self, and this can relieve "suffering," even as the diver contends with vigorous pain on a regular basis.

6.3 - Discussion

In the Introduction of this dissertation I briefly discussed how discursive processes construct radicalized images and ideologies of the Miskitu diver as ignorant and militant, or in some cases, as passive unknowing victims. One of the pragmatic consequences of this form of racializing discourse is assignment of blame to the divers for their misfortunes and sufferings, thus leading to a pervasive acceptance of the occupation's brutality—the moral stance being that they, the divers, or the Miskitu people, have brought this problem upon themselves through their own greed and/or ignorance (Farmer 1992; Briggs and Mantini-Briggs 2004). This dissertation is not intended as an explicit response to these racializing discourses and does not present the complexity of Miskitu dive techniques with an overtly political or humanitarian intent. Rather, the complexity has emerged spontaneously from a more fine-grained analysis of dive practices, made possible by ethnographic immersion and participant-observation-based methods of the researcher, as well as from the simple fact that hunting lobster undersea is complicated work that one must learn to accomplish effectively if he intends to survive. I believe that most people would instantly recognize the intricacy of panga diver practices if they only witnessed them first-hand. But this focus on skill is not meant to distract from the life threatening aspects of this job!

When I began my fieldwork, I asked lobster divers relentlessly what made them unique compared to other men in their community. Their answer's were usually very straight forward, "we are the same, normal." I meditated on the meaning of these kinds of responses for months. How could they possibly imagine themselves as such average men considering that they entered the depths of ocean nearly everyday while engaging in this perilous kind of work? I propose a twofold answer to this question. First, the seasoned diver's ability to inhabit and body-forth into the depths of the ocean can instill a steadiness in comportment that both complements and reinforces a lobster diver's capable sensibilities. Through effective navigations, the undersea world becomes less opaque and much of the otherworldliness becomes backgrounded in one's consciousness. It is transformed (albeit, with fragility) into a place where one can project and act with intention and agency to accomplish goals. Predictability and a steadiness in comportment impede feelings of fear and anxiety—feelings that manifest within the unskilled body, leading to accidents. Thus, successful seasoned divers often approach their extraordinary work with a journeyman attitude. Second, because of the extreme dangers involved with lobster diving and presumptions that it is especially damaging to the surrounding oceanic ecosystem, non-Miskitu Corn Islander's overwhelmingly view the work as both destructive and extremely foolish. For many Nicaraguans the lobster diving industry has come to symbolize the persistence of ignorance and backwardness on the Caribbean Coast, and the Miskitu people's resistance to modernity. In local CI discourses, lobster diver's are often portrayed as oddities who display little care for themselves or their families—it is said that they dive because they just don't know any better and are militantly stubborn. Local divers, of coarse, are fully aware of these portrayals and combat such discourses by emphasizing that are just trying to do what every other nonMiskitu resident is trying to do; that is, make enough money to support one's self and family while moving towards a better future. They argue that if they had different resources available to them, they would give-up lobster diving. To navigate these disparaging local perceptions and their links to histories of structural and symbolic violence, diver's often downplay the presumed extraordinariness of their work and align themselves with a pervasive moral discourse that presents ordinary men working extraordinarily hard to make money in a very poor nation. They try to construct themselves and consistent, reliable, and pragmatic, the kind of person who can be trusted loans and cash-advances. Corn Island lobster divers have watched modernity spread through the Caribbean Coast, and have experienced first-hand its unequal distributions across ethnic lines. The current Nicaraguan government wants to end the lobster diving, and government officials seem to have a very tough time understanding why Miskitu people want to continue with it. One important reason is that lobster diving is a source of cash that supports hundreds of households and thousands of Miskitu people. An equally important reason, that is far less visible, is connected to issues of autonomy and ethno-nationalism. The government wants to reintegrate those Miskitu men who loose their jobs—due to the end of dive industry—into the current Caribbean seafood industry, and seem confounded by Miskitu resistance. But what those government officials may be failing to consider, is just how aware Miskitu people are of who controls the structure and profits of the current industry. Miskitu divers are keenly aware that the industry is controlled by "Spanish" Nicaraguans of the Pacific Side and interpret efforts of (re)integration into the broader industry as covert efforts aimed as assimilating them into a larger national-level economy that they experience as relentlessly oppressive to the Miskitu people. Lobster diving is often practical and necessary, a way putting food on the table, but it is also a

way of pushing back against a government they do not trust. In many ways, the pains of diving, are pains of Miskitu autonomy.

NOTES CHAPTER SIX

- ¹ Not all injuries or cases of "being hit by the pressure" result in bodily injuries that persist.
- ² This is NOT to say that the lobster divers want the acopios to go away. They are needed for other artisanal fishing vessels as well.
- ³ Translated from Kriol English
- ⁴ Satan is drawn from the English language and is widely used by speakers of Miskitu.
- ⁵ I have been told MANY conflicting stories regarding hyperbaric chamber treatment and liability/payment procedures. Chamber treatment policies appear to change often.
- ⁶ Corn Island divers are supposed to be insured through their acopios, but again, their seems to be a great amount of ambiguity regarding procedure, and Corn Island divers have told me that many lobster divers are not insured when they get injured. Acopio owners tell me that the divers do not follow through with their responsibility to pay for health insurance, while the divers say the cost of insurance is automatically deducted from their pay.
- ⁷ Translated from Spanish.
- ⁸ Translated from Kriol English
- ⁹ Translated from Kriol English

CHAPTER 7

CONCLUSIONS: A VIEW FROM BELOW

National crises, such as epidemics, provoke the mobilization of state-sponsored institutions to protect their citizens. When services fail, and state officials are asked for answers, the blame is sometimes cast upon the victims through complex discursive processes. In such cases, *citizens* are recast as *denizens*, and discursively placed at the periphery—or outside of the modernizing nation-state. Miskitu divers are at the center of this process in Nicaragua. The situation in Caribbean Nicaragua is particularly interesting because of the nation's explicit attempts to "fully integrate" the Miskitu citizens into state politics and projects. The war between the post-revolution Sandinista government and the "Contras"—predominantly Miskitu soldiers is far from forgotten, and many CI lobster divers still talk about the potential for a "new war," if the current Nicaraguan government becomes too heavy-handed and attempts to take away the lobster diving industry without compensation and appropriate structural changes in the Caribbean seafood industry. Miskitu divers often attribute poor health services and dangerous working conditions more generally, to the recent migration of Pacific Coast people—and their politics—into the Caribbean Regions. Some view the recent influx of "Spanish" (Mestizo) migrants as a slow polluting "invasion" into their lands and lifeways (see Santa Ana 2002). There is no doubt that processes contributing to autonomy, ethno-nationalism, and racialization have become an important aspect of the "dive-problem."

What has been demonstrated in this dissertation are the ways in which regional autonomy and political-economic structures in Nicaragua are being confronted by enskilled Miskitu bodies,

who experience themselves capable and durable, despite their low socio-political and economic status in the country. When divers descend to the depths of the ocean, we loose sight of them, but they emerge from the sea with a product that is highly valued globally. They have gained access to this product in a way that Nicaraguan Others cannot. Political-economic processes work to render Miskitu divers invisible, but despite the odds, again and again they resurface to demand a certain form of participation within the larger Nicaraguan economy. They seek personal and collective autonomy, and the enskilled body in this context endures so it may confront and negotiate "integration" into a system that oppresses them. But much is at stake for these divers each time they enter the depths of the sea, and many of them find their bodies and their their lived worlds collapsing under the pressure of their work practices and their commitment to certain ways of living. Moral becoming for these divers is tied to the history of the region, an evolving relationship with the State, and the neoliberal world that surrounds their country and also solicits their participation. The enskilled body provides, but is always a political and moral body navigating desperation and possibilities. It is this capability to continue these navigations through the enskilled body that leads to its racialization by Others who reject its resistance to conformity.

7.1 - Autonomy and Racialization

When lobster divers talk about their economic struggles and work-related illnesses, they often find links between their predicaments and the collective Miskitu quest for ethno-political autonomy on the Atlantic Coast of Nicaragua. Many Miskitu people convey that they are currently experiencing collective feelings of vulnerability and ambivalence in their links and

severances from the state. After the revolutionary Sandinistas (FSLN) took control of the Nicaraguan government in 1979, they quickly began implementing radical changes in political, economic, and social policies. Caribbean Coast peoples, who for the most part did not take part in the revolution on the Pacific Coast, responded to new reforms first with skepticism and later with militant confrontation (1979-1988). Some scholars have argued that the FSLN inadvertently recreated the very imperialistic structure of power that they had opposed in the revolution (see Baracco 2011a; Hale 1994; cf. Ramirez 1983; Calderon 1983; Ortega 1991; Borge 1983). Sandinista leaders openly discussed Miskitu cultural backwardness in public discourses and made it their priority to introduce Miskitu people to a process of conscientization that would promote modernization, instill *class-consciousness*, and teach them to recognize the oppressive powers of "Yankee imperialism" (Baracco 2005; Cardenal 1981; Freire 1973, 1990; Wheelcock 1974). Research by social theorists such as Hale (1994, 1987), Bourgois and Hale (1989), Gordon (1996, 1987), Vilas (1987, 1989), and Bourgois (1981, 1982, 1989), have pointed to an enduring ethnic consciousness among the Miskitu. They argue that this ethnic consciousness was constituted through historical interactions with colonialists, imperialists, and missionaries, and the asymmetrical structures of power that emerged from these interactions (see also Garcia 1996). In their analyses of these complex historical interrelationships and events, these researchers have shown how ethnic consciousness stemmed from a history of ethnic militancy an important component of contemporary Miskitu memory that was "erased" in FSLN discourses (see Diskin 1991, 1989, 1985). Regional problems, such as the DCS epidemic among Miskitu lobster divers, are often lodged within broader nationalist discourses of ethnic divisions, autonomy, and the Caribbean Coast's relationship to the nation-state. From the perspective of

many Miskitu lobster divers, the state has impeded their opportunities to gain material resources that would greatly improve their health and livelihoods.

Connor's (1994, 2004) writings on ethno-nationalism argue that it is not necessarily an opposition to modernization programs that usually mobilizes ethic groups, but their engagements with modernization that initiates a heightened self-awareness in their relationship with the nation-state and its dominant group. "Ethnic groups" do not simply defend their "cultures" against aspects of modernity to protect their life-ways, but through advancements in communication, transportation, education, etc., come into increasing contact with "Others" and become aware of their marginal status within the nation-state (2004). This certainly seems to be the case among lobster divers, who use the national controversies regarding the lobster diving industry to explore their ethno-political and economic positioning within the country. The enskilled lobster diver's body is sometimes the vehicle that mobilizes and represents this marginal status and the Miskitu people's movement towards their notion of modernity. A hyperawareness of status within the nation-state can serve to mobilize ethnic groups against assimilationist doctrines while strengthening cohesiveness within the group. Thus, it is in the context of an engagement with modernity, not its rejection as "Other," that ethnic groups sometimes begin shaping their ethno-nationalist ideologies of autonomy.

On the Caribbean Coast, proposed interventions connected to lobster diving tend to inadvertently demonstrate group differences and illustrate (at least to Miskitu people) how the dominate group would experience a more profitable kind of modernity than other groups—what Connor (2004) would call the "demonstration effect." We should remember that the Miskitu *use* notions of language rights, subsistence patterns, "Anglo-affinity," and "the preservation of

indigenous culture," to strategically position themselves as a group within a competitive sociopolitical context. These things by themselves contribute to, but do not in themselves create the
"consciousness" that compel Miskitu people to mobilize; rather, these cultural factors became
issues *because* Miskitu people are mobilizing and carefully constructing discourses of autonomy.

Considering Miskitu mobilizations as "strategies," rather than "tactics," brings up important
questions in regard to autonomy being a truly "separatist movement." Connor (2004) has argued
that ethno-national movements primarily seek freedom from a dominant group and typically do
not embody aspirations for developing a completely autonomous state acting within an
international system. Studies on Miskitu autonomy seem to have focused on absolute autonomy,
overlooking interdependence between the autonomous Caribbean Coast and the Nicaraguan
nation-state, and how autonomy has been made meaningful at different moments in time for
Miskitu people. Even in its suffering and endurance of structural and symbolic violence, the
enskilled Miskitu body resists domination and demands negotiations of autonomy.

Building on the philosophy of Young (2001), Jessica Cattelino (2008:163) has argued that Seminole configurations of self-determination are best understood as sovereign interdependence or "relational autonomy, with freedom based not on independence but on non-domination" (see also Cobb 2005; Povinelli 1993; Connor 2004). She argues that "sovereigns" are characterized by building "productive relationships" with other sovereigns through treaties, negotiations, obligations, interdependency, and systems of reciprocity (2008; see also Barker 2005). Indigenous sovereigns negotiate legal systems, economies, and identities, dynamically and opportunistically, at local-tribal, national, and international (pan-indigenous) levels. In short, they form symbolic, material, and ethical relationships, that shape expectations and define the

meaning of sovereignty in a particular ethno-political context (Cattelino 2008:190). Social theorists studying Caribbean Coast autonomy in Nicaragua have not explicitly invoked the "interdependency" paradigm in their research. Studies have focused more intently on how and why Miskitu people mobilized against the FSLN, instead of examining the way Miskitu people are continuing to negotiate the meaning and interrelationships that are necessarily involved with autonomy. Although, Caribbean ("Atlantic") Coast autonomy was officially established in 1987, the Miskitu, as well as the other indigenous groups on the Caribbean Coast, are still unclear of their relationships to the Nicaraguan state, and their rights and obligations in regard to their own lands and natural resources—including oceanic resources! It is not uncommon to hear a Miskitu person express wishes for absolute autonomy, and then fifteen minutes later ruminate about the government's obligations to the Miskitu people (Humphrey 2005). Anthropologists have shown how indigenous groups conceptualize and express notions of indigenous autonomy through specific symbolic acts and rituals that index complex interrelationships (see Cattelino 2008; Richard 2009). In my own reading of research conducted among the Miskitu, very few of these kinds of symbolic acts have been explicitly identified (but see Minks 2013). We know much about the history of the Miskitu people and the socio-political and cultural processes that sparked their militant mobilization, but the current meaning of autonomy for Miskitu people, and how that meaning is dependent upon complex interdependencies, is ambiguous in most of the existing research. Looking closely at the growth of the enskilled body in this context helps us understand why an industry like lobster diving endures on the Caribbean Coast and how, and why, it is used politically.

Despite soaring incident rates and the devastating effects of DCS, few people outside of

Nicaragua's Caribbean Coast have been informed of the epidemic proportions of this problem, and after several decades of widespread paralysis and death due to deep-sea lobster diving along the Mosquito Coast, interventions designed to prevent the illness, or assist in recoveries from its lasting effects, have not been implemented effectively. Of the three predominant ethnic groups on the Caribbean Coast of Nicaragua (Mestizo, Creole, and Miskitu), it is overwhelmingly Miskitu men that procure work as divers, while ship captains, biomedical administrators, public health officials, and those who have the political power to implement safety regulations for the lobster industry most often identify as either Mestizo or Creole. Even though government officials truly want lobster diving end in Nicaragua, the racialization of this industry has been an important reason for its continuation. These racialization processes have emerged through the semiotically mediated interactions of persons oriented toward historical institutions and global processes of modernity. As those with political and economic power have distanced themselves from much of the responsibility regarding the proliferation of DCS, the disease is becoming characterized as an illness of the Miskitu people (see Briggs and Mantini-Briggs 2003). A process of racialization is infusing DCS and related phenomena with racial meanings (see Omi and Winant 1994). In short, there appears to be a pattern of non-Miskitu people treating DCS not as a biomedical, epidemiological, or safety problem of the nation-state, but as a localized Miskitu problem. A "geography of blame" is being sketched, as Miskitu "beliefs" and cultural practices are simplified and stereotyped to produce explanations for the emergence and proliferation of the illness (Farmer 1992). These racialized cultural explanations blame Miskitu backwardness and ineptitude for diver misfortunes and in so doing conceal other social, political, and economic aspects of the disease while simultaneously racializing social inequality. This dissertation has

provided evidence that circulations of racializing discourses impact forms of *medical profiling* a process whereby racism becomes rooted in public medical institutions and subsequently conditions medical services (Briggs and Mantini-Briggs 2003). Different forms of racializing discourses take more or less overt and/or covert forms, but never-the-less have pragmatic impacts on the problem. Popular forms of cultural media have circulated these discourses, imbuing them with power and legitimacy (see Wilce 2009). Many of these discourses strategically combine scientific voices and evaluations of culture into "stories" of Miskitu people as modernity's spoiled subjects (Latour 1993). Miskitu lobster diver, however, do not passively resign their fates to the dominant ideologies and institutions controlled by others. The Miskitu people have a long history of resisting and confronting hegemonic power in Nicaragua—for example, Spanish colonialism and British/U.S. imperialism. Navigating the racialization of DCS inevitably impacts their illness experiences as it connects them to modernity's insistence of rational progress and disciplined bodies (Foucault 1965); however, Miskitu people negotiate racialization through their enskilled bodies, and as subjectivities shaped by complex sociocultural milieus. They harness important cultural resources that guide them in times of crises and work to position them in relation to racializing discourses. They invoke their status as national subjectivities, even as they negotiate autonomy.

Racializing discourses are nuanced and often work subtly, sometimes covertly, to structure social relationships (Hill 1998, 2000). They can even be below the "discursive consciousness" (Kroskrity 1998, 2000; Giddens 1984) of individuals who are committed to improving the lives of those who suffer. Smedley (1993) defines race as "a worldview,...a cosmological ordering system structured out of the political, economic, and social realities of

people who had emerged as expansionist, conquering, dominating nations on a worldwide quest for wealth and power" (28). This theoretical position points to important political-historical processes and encourages research that explores how "race-making" populations emerged (Williams 1989). Studies of contemporary global processes have demonstrated how new "racialscapes" (Harrison 1995) are taking shape, how they are being contested, and how they are changing in relation to new economies and political formations at global and local levels (Omi and Winant 1994, Winant 1994). Miskitu experiences of suffering and inequality fit into these global perspectives on race. Racializing discourses circulate in this socio-political and economic context of suffering, but they emerge also from Nicaragua's growth as a nation and the country's status in the world. Identifying entextualization processes demonstrates how some discourses are becoming authenticated and reproduced as a course towards racialization. Distinctive meaningful values of racializing locutions come to be shared cultural conceptualizations through specific semiotic activities and devices, such as casting diver suffering as "mere-suffering" in political speeches and humanitarian press releases. Those who seeking to help also contribute to the emergence and social expansion of semiotic regularities that racialize (Agha 2007:64-65). Medical discourses, for example, sometimes bring scientific "expert" voices (physicians, epidemiologists, anthropologists, etc.) and common misconceptions of "a culture" together in a way that brings "invisibility" to racism in local contexts (Hill 2008). Briggs (2005) has proposed a new analytical model that foregrounds the importance of "communicability" for studying the discursive processes underlying racialization and medicalization, recommending that researchers turn their attention to the "productive capacity" of discursive circuits and ideologies of communication in "producing subjectivities, organizing them hierarchically, and recruiting

people to occupy them" (Briggs 2005:269; see also Kroskrity 2000; Irvine and Gal 2000; Gal 1988, 1989; Irvine 1989: Woolard 1985). What is significant about medical discourse is the way it moves between socio-political "sites" along real and imagined communicative circuits to characterize and presumably regulate self-actualizing national subjectivities (Briggs 2005; cf. Foucault 1973). Racial discourses can become naturalized, empowered, and legitimized as truthful through what Irvine (1989) calls "chains of authentication," a process by which certain discourses gain real world value and factuality in their multiple connections to authorized persons and the meta-narrative of modernity. All of these processes contribute to generating the "diver-problem" and simultaneous work to conceal it in this context of structural violence.

The processes of enskillment analyzed in this dissertation demonstrate, in part, how and why these racializing discourses emerge. Outsiders (non-Nicaraguans) generally see the industry as primitive and exploitive, and link to the problem to simplified notions of structural violence. The divers themselves perpetuate this perspective in the way they highlight the destructive aspects of the industry, their lack of training, and their suffering within the nation-state and the global economy. This perpetuates a "top-down" conception of the problem and thus puts pressure on the buyers of the lobster (the U.S. and Europe) and the Nicaraguan government to "fix" the problem. The U.S. recently decided to boycott Nicaraguan lobster—their minimal efforts to solve the problem after decades of capitalizing on the loosely regulated Nicaraguan lobster industry (European nations still import the lobster). The top-down approach to the problem, however, erases Miskitu political voices, and ignores how Miskitu people might play a role in transitioning out of the lobster diving industry. This form of erasure is a type of symbolic violence in itself. The Nicaraguan government has attempted to end the industry, but finds great resistance from

Miskitu people despite their best efforts. The government has reacted by portraying Miskitu suffering in this context as mere-suffering, arguing that their is no need for the destructive industry to continue. But this is not how Miskitu people generally position themselves in relation to the problem. They worry first that they will not be able to feed their families if lobster diving ends, but they are also extremely apprehensive of their form of participation in the industry once the diving ends. They do not want their options taken away by a government, and group of people, that they historically have not trusted. Miskitu people see a re-integration into the larger seafood industry as integration into a political and economic system that attempts to control their bodies and keeps them at lowest levels. From the diver's point of view, they are "suffering-for." The view from below allows them to emplace themselves in such a way that they can actively continue their negotiations of autonomy, citizenship, and modernity. This emplacement is made possible by the enskilled body, produced in part by the very processes it confronts.

APPENDIX

I. The chart below is provided to summarize the many reasons provided by lobster divers to explain why they became lobster divers and continue with their work. In the chart, each explanation is connected to the four analytical devices put to work most explicitly throughout this dissertation: structural violence, vulnerability, moral orientations/trajectories, and enskillment.

	Why Dive?	Economic Dynamic	Moral Dynamic
1)	Economic desperation.	Many Miskitu families living on Corn Island find themselves more vulnerable to material needs. Food, electricity, and medical care, for example, can be more costly than in mainland villages. The lucrative lobster industry and the cash-based economy bring Miskitu families to CI, but the move can separate them from village support mechanisms.	Pana Pana Laka, or "food sharing," is highly valued in many Miskitu mainland villages, but it can be far more difficult to practice on Corn Island, where most food is purchased, rather than grown or traded. Many Miskitu families migrating to Corn Island become separated from small-scale subsistence practices (agriculture and hunting/fishing) that support long-term cycles of reciprocity within and between village families. Because the CI Miskitu population is an assemblage of families from many different mainland villages, families often lack histories of reciprocity between them, making the moral ideal of pana pana laka far less practical.

	Why Dive?	Economic Dynamic	Moral Dynamic
2)	Gain control of work practices/body.	Divers describe a structural hierarchy existing in the fishing and seafood industry in Nicaragua that corresponds with ethnic divisions in the country. Many researchers have examined the historical processes that have supported the greater success of Creole and Mestizo individuals in Caribbean Coast business operations and its links to American an British imperialism in Nicaragua.	Many Miskitu men indicated in interviews that they feel exploited by their non-Miskitu employers, who treat them as disposable. On large lobster diving ships, captains unilaterally choose the (sometimes dangerous) dive locations, whereas CI skiff divers usually have a say in where, when, and how they will dive for lobster. Corn Island divers want control over their own bodies. Miskitu people feel that they have historically been encroached upon and cheated out of valuable resources. A second moral aspect of this explanation is the high value placed on individuality in many Miskitu communities.
3)	Miskitu people are more familiar with hard work and do not scare as easily when compared to other ethnic groups on the Atlantic Coast.	Divers often told me that Miskitu people "know all different kinds of work" and are not "afraid" to do hard work. They relate these qualities to their greater familiarity to "the bush" (jungle/forrest/ocean) and their ability to exploit a wide array of resources to provide for their families and village. There is certainly a link to mobility and subsistence practices.	Creole and Mestizo people are "too proud," "too scared", or "too soft" to endure hard work in the bush. Their inability to perform the appropriate measures of hard and soft qualities in context reveals them people of lesser character, but also their more-distant relationship with the ecology of the Caribbean Coast.

	Why Dive?	Economic Dynamic	Moral Dynamic
4)	Difficult to gain capital needed to purchase a panga/motor and start your own fishing or lobstering operation.	Many Miskitu men hope that lobster diving will lead to self-employment. Diving is considered temporary work, taken-up as way to earn quick money that can then be invested in a skiff, motor, and traps. Because CI divers rarely own highly valued land to use as collateral, it can be very difficult for them to borrow the needed up-start money from banks or one's social network. This orientation towards a cashbased economy and capitalism reveals the overwhelming transition to and dependance on commercial lobstering along the Caribbean Coast.	Many divers would rather risk the dangers of lobster diving than resort to farming and foraging to support their families. Lobster divers sometimes described farming and foraging as forms of prolonged suffering. This indexes their proximity to other groups on the Coast and observations of differential successes across ethnic lines.
5)	Temporary solution to solve a financial crisis	Men sometimes turn to lobster diving when they find themselves or family members in dire straights and needing quick cash to pay for necessities such as medicine/medical care, electricity, or food. Lobster diving requires equipment that can easily be borrowed, so men can quickly find themselves underwater if they feel they must earn cash quickly.	Family crises will sometimes lead Miskitu men to take-up diving out of as a way demonstrating responsibility and caring for others. This can be an especially dangerous reason to dive because many men who dive for this reason alone do not have the needed skills to avoid injuries.

	Why Dive?	Economic Dynamic	Moral Dynamic
6)	Paralyzed - Only vocation available to them	Many CI lobster divers who have become paralyzed in dive accidents can no longer perform other forms of labor associated with the fishing/seafood industry; however, the weightlessness experienced when diving allows some paralyzed divers to continue diving. Because the Caribbean Coast economy is driven by the fishing/lobstering industry, other forms of labor that might accommodate those suffering from partial paralysis are rarely available.	Returning to diving after suffering permanent paralysis not only allows men to begin earning money for their families again, it returns their sense of mobility and their sense of an enskilled, capable self who can move towards meaningful moral horizons.
7)	No Education	Lobster divers sometimes expressed regret that they did not further their education—though many also expressed some ambivalence in how education would actually effect their job opportunities. They feel that Miskitu people have pursued education less often than members of other ethnic groups on the Coast because of access and economic strain.	Miskitu people often say that they have unequal access to employment positions, where they might put their education to use.
8)	Had a friend or family member that introduced diving to them (but most likely did not train them in diving)	Like other job opportunities along the Caribbean Coast, many of them become available and are taken-up because of proximity.	Men do not want their children to become lobster divers, because they fear for their safety; but family members will sometimes acquaint other members of the family with diving so they can bring more money into the extended family and promote the well-being of a larger amount of people.

	Why Dive?	Economic Dynamic	Moral Dynamic
9)	Addicted to drugs/alcohol and in-debt	Some divers spend their earnings on drugs and alcohol and eventually find themselves diving just so they can feed their addictions. Diving while intoxicated is extremely dangerous, as addiction can weaken the body and encourage poor choices.	Drug addiction is generally seen by local Miskitu people as highly destructive to individuals and families. Their are many stories of crack cocaine addicts killing family members for attempting to intervene and end an occurrence of binging.
10)	Skiff diving allows them to come home to their families at the end of each day.	Dive pangas on Corn Island are independent operators who work for themselves and sell their product to acopios. This form socio-economic organization demonstrates a pattern of change in economic practices for Miskitu people. Corn Island panga operators are capitalist entrepreneurs who want to take advantage of the global free-market economy. Their status as independent operators, however, can leave them with no affiliations to give them support when crises arrive.	Panga divers explained that they want to come home to their wives and families everyday so they can care for them and keep the family together. Working on large ships means being away from family members for weeks or months at time. Many divers say that working on the large ships is a good way to loose your family to other men. If a diver is injured, however, he is not compensated or assisted by the companies he sells to, sometimes leading to abandonment and extreme social isolation.
11)	War, political turmoil, migration	Wars and natural disasters directly contributed to death of many industries on the Caribbean Coast and structured the current seafood industry.	Wars and natural disasters not structured what industries emerged and how Miskitu people would participate in them; but also directly affected the vulnerabilities individuals and families had to confront and the choices they could make when evaluating how they should care for themselves and others.

Fig. Append.1a - Why Dive

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