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Tourism and the environment in Bocas del Toro: manifestations of the neo-colonial metabolic rift

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Vassar College

Tourism and the Environment in Bocas del Toro: Manifestations of the Neo-Colonial
Metabolic Rift

A Thesis submitted in partial satisfaction of the requirements for the degree of Bachelor of Arts
in Sociology

By

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Abstract

This thesis explores the relationship between the tourism industry and the environment in Bocas del Toro, Panamá through the case study of La Solución, a neighborhood built into a mangrove forest alongside the runway of the Bocas del Toro International Airport. By thinking about the relationships to physical space, the history of the archipelago, and the roots of the tourism industry, this thesis is grounded in the historical context of Bocas del Toro. This project draws on interviews conducted with residents of the neighborhood, business owners, and tourists to analyze this relationship between the tourism industry and the environment and build on existing knowledge of the area. La Solución is both a manifestation and a subversion of the neo-colonial metabolic rift that shapes the relationship between the tourism industry and the environment. Understanding the structures and forces that have created this neighborhood can provide insights into the ways in which La Solución and its residents are commodified alongside the environment via the logics of the neo-colonial metabolic rift.

For my parents, whose support means everything to me.

For my Dida, who always encourages me to “keep writing.”

For Tejan, whose dreams inspire me.

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Introduction

As I walked out of the airport in Bocas del Toro, I immediately got into a taxi to go to the School for Field Studies where I was studying abroad for the fall semester in 2016. My drive to the campus consisted of driving past the high school, through tourist areas, passing hotels and hostels, and some residential areas that bordered the single road that led from Bocas town out into the rest of Isla Colón. It was not until much later in the semester that I learned of the neighborhood La Solución located behind the airport, spreading out along the length of the runway. Drastically different from the main street of Bocas and completely visible to the passengers of planes as they land and glide along the runway, La Solución exists next to the very infrastructure that brings tourists to the island. So why did it take me so long to realize the complexities of the location of the neighborhood?

The invisibility of La Solución is something that first drew me to this topic. I was amazed that this neighborhood could exist in such close proximity to the center of the tourism economy in Bocas without visitors to Bocas having any idea that the neighborhood existed (see Appendix A. Map 3). As I learned more about the neighborhood and spoke to folks who live there I became interested in the interactions between the tourism industry, the environment, and La Solución, however direct or indirect they may be. A neighborhood that has come into existence over the course of the last twenty to twenty-five years, La Solución can be considered a way to read the relationship of the tourism industry to the local communities in Bocas and the degrees to which the tourism industry has shaped the geographies of the islands.

It is important to understand the broader historical context of Panama, and the history of Bocas del Toro, both as sites of neocolonialism and distinct foreign influence. The legacy of the Panama canal is a powerful reminder of the ways in which the United States, and other colonial

and neo-colonial powers, have influenced Panama's economy, politics, and social structures in order to profit from the natural geography of the country. Yet Panama's global situatedness is also related to the ways in which tourism has manifested in the country. These external forces and legacies of neocolonial influence have shaped the country in ways that are legible and likely in ways still unrecognizable. To understand the ways in which folks living in La Solución are conceptualizing their relationship to the environment, there needs to be an understanding of how influences directly tied to capitalism and consumerism have influenced relationships between people and nature.

This is especially true in Bocas because of the influence of the United Fruit Company, which began to produce bananas in Bocas del Toro in the late 1800s (Spalding 2013:180). The company drastically altered the geography of the islands by creating spaces for plantations and living quarters while also striving to eliminate malaria. Thus began the country's neocolonial relationship with the United States. Although Panama was never a colony of the United States, through financial relationships and military action, the United States has historically controlled who wins presidential elections, staged military coups in the country, and has maintained financial power via the control of the canal and the prowess of the United Fruit Company (Frenkel 2002). Though control of the canal was returned to Panama in 1999, Panama has seen significant increases in the foreign population between 2000 and 2010, demonstrating the degree to which Panama is structured in some ways as a colony of the United States that American citizens are incentivized via economic measures to retire to. In 2000, the number of people born in the United States who live in the Bocas del Toro archipelago was 69 (INEC 2000). By 2010, the number of people born in the United States who live in the archipelago had increased to 416 (INEC 2010). This relationship is also seen in the numbers of Americans who flock to Panama

for tourism and those who choose to study in Panama. The citizens of the United States who choose to spend their money in Panama increase the purchasing power of the United States and therefore the financial power of the United States as an important influence in Panama. In this way, the United States has continually influenced and altered acceptable land use in Panama through the tourism industry, a possibility based in the neocolonial relationship between the United States and Panama. This is important to consider as we think about the ways in which the environment is being consumed in Panama, and as we seek to understand whose consumption of the environment is validated. Historically, the consumption of nature by foreign entities has been validated and encouraged. This trend continues with the tax breaks afforded to foreigners looking to open a business in Bocas del Toro. Their consumption and commodification of the environment as owners of tourism businesses is validated via the same structures as the resource extraction enterprises of foreign entities.

In the same way that the consumption of the environment by foreign entities has been validated and encouraged, rights to land for indigenous groups in Panama have been discouraged and stripped away. There are five comarcas constructed in Panama, each with their own legal process of creation and set of rights decided upon by their leaders and the federal government. In the Ngäbe Bugle comarca, legal processes and repeals of agreements have allowed the Panamanian government to use land within the comarca to construct the Changuinola Dam without the consent of the Ngäbe peoples (Runk 2012:28-29). In fact, Runk reports that only one of the five comarcas has managed to maintain its original indigenous governance (Runk 2012:26). There is a clear disrespect for the legality of the comarcas and for the right to land held by the indigenous groups that originally occupied larger parts of the country than the areas to which they are currently relegated. The Panamanian government has not hesitated to rescind the

promises made to indigenous groups when it suits the economic desires of government officials (Runk 2012, Horton 2006). This relationship between land, indigenous communities, and the Panamanian government is an important precursor to the creation of La Solución as we think about who the government has legitimized as holders of land and who has actively shaped the geography of Panama.

The projects of the World Bank and other institutions to turn Panama into a tourist destination can also be seen as a colonial project, much like the U.S. control of the Canal (Frenkel 2002). The tourist economy in Panama is distinctly set up to benefit foreign investors, specifically through Law No. 8 known as the Tourism Incentive Law (Mapes 2009:246). The 1994 law allows exemptions from land tax, import duties, and income taxes to varying degrees and explicitly states its purpose as geared towards increasing the number of foreign tourists (Mapes 2009:247). These conditions underline the same motivations and priorities as the struggle for land rights in Panama, highlighting the degree to which foreign powers have shaped the tourist economy in Panama to meet their image. These influences have far-reaching impacts and have directly contributed to how local government officials think about La Solución as a potential site for future tourism rather than as a land occupied by indigenous groups or an endangered mangrove habitat. With the government project to relocate the neighborhood of La Solución to an alternative location on Isla Colón, understanding the relationships between the tourism industry and the environment in Bocas del Toro are important for thinking through how this project fits into the larger sociocultural history of Panama. This project asks questions like: How do the multiple geographies of Bocas del Toro intersect with the geographies of La Solución? And what are the spatial, economic, environmental, and geographical relationships between La Solución and Bocas del Toro? How has the neo-colonial metabolic rift manifested in

La Solución and Bocas del Toro? This thesis seeks to understand how La Solución fits into these larger narratives and the ways in which the neighborhood can be extrapolated to understand more broadly the ways in which the relationship between the capitalism and the environment has changed in Bocas del Toro.

Literature Review

In order to understand the significance of the geography of Bocas del Toro as it looks today, it is important to understand the ways in which the geographies of the archipelago, Isla Colón, and Bocas town were shaped prior to the tourism industry. There is historical documentation of the development of Bocas del Toro as it gained prominence, first as important to banana plantations and then as important to the growing tourism industry in Panamá (Tucker 2000; Jackiewicz & Craine 2010). Due to the increasing demand for land during the banana boom and the desire to eliminate diseases in the Bocas archipelago, mangroves were cut and filled to make more room for people to live and to prevent the spread of disease, like malaria (Upham Abrams 1914). This historical perspective is important for understanding migration and settlement patterns in Bocas in order to understand how forces of tourism development and foreign investment impact marginalized populations.

While thinking about the migratory forces that have shaped La Solución, it is important to have an understanding of how migratory studies of other small communities have been done. Studies have been done elsewhere in the world to look at settlement patterns of various communities (Lizarralde 1991, Wolfe 1966, Germundsson et al. 1991). Kirch et al. (2004) evaluate the importance of land to agrarian communities and the ways in which properties of land and geographical factors contribute to where and how communities make their homes. After

considering the ecological importance of mangroves to different species, it is also critical to recognize the importance of mangrove ecosystems to humans as well in order to better understand the ways in which people are relating to mangrove ecosystems. The ecosystem services framework and how it applies to mangrove habitats provides a lens more focused on the ways in which humans in particular utilize mangrove habitats both intentionally and unintentionally from which to consider the numerous benefits offered to humans living in mangrove habitats (Lee 2014). Understanding the relationships between humans and the environments they interact with is important for understanding later the intricacies of the relationships between humans and the environment as governed by capitalistic enterprises. The ecosystem services framework details four types of services derived from environmental systems or habitats: provisioning, regulating, cultural, and supporting (Lee 2014). This framework is useful in tandem with the sustainable development framework to understand how the uses of mangroves impact the social, environmental, and economic factors that affect their coverage and the ways in which the ecosystems are valued.

There have also been numerous studies done considering anthropogenic effects on mangroves (Valiela et al. 2001, Chaves et al. 2009). Many point to instances of pollution or destruction, indicating that the relationship between humans and mangroves often is one of development at the expense of the habitat (Cavalcante et al. 2009, Himberg 2016). This is important to consider when thinking about the roles of tourism and foreign investment on Isla Colón as compared to the impacts of mangrove communities on the ecological health and coverage of mangrove ecosystems. Ellison and Farnsworth (1996) note the rapidly decreasing mangrove coverage on the Caribbean coast of Panamá. They observed a change from 204 square kilometers mangrove area in 1980 to 59 square kilometers in 1990 (Ellison and Farnsworth

1996). The study attributes these changes in mangrove coverage to pollution, urbanization, industrialization, and tourism. Although this study is now outdated, it is important to note that towards the beginning of Bocas del Toro's shift to a tourism economy, the impacts for mangrove habitats were substantial and were attributed early-on to urbanization and tourism. These studies are valuable in conceptualizing the relationship between the industries that have historically moved through Bocas and the ecological habitats that have served them. In Bocas, this relationship is one of degradation in the name of progress, indicating the degree to which industry has commodified the surrounding environment.

Cavalcante et al. (2009) note that in terms of pollution, ongoing pollution poses more problems for the ecological health of mangroves than past pollution. This is also important to consider given the waste management system in Bocas town and its accessibility to different segments of the population. In Bocas, garbage is often inconsistently picked up. At the plant, the garbage is indiscriminately burned outside, releasing toxins constantly into the air. The ashes are then buried at a nearby site. There is no recycling in the archipelago, leaving plastic bottles as a major contributor to the waste stream. This infrastructure means that a lot of air and water pollution is happening consistently in Bocas. However, Spalding (2013) notes that the hegemonic discourse that blames rural communities in the Global South for large environmental impacts is lacking the connection between the social and the environmental, disregarding the reasons why these communities may not have access to more environmentally sustainable infrastructure. Spalding (2013) instead advocates for observing differences over time within a larger political economic context. This study aimed to locate the environmental and social phenomenon observed inside a framework that allowed recommendations to be legitimate resources for policy makers. This framework is incredibly important to hold while thinking about

environmental degradation in Bocas, especially in the context of the tourism industry. Newing (2009) evaluated the ways in which seemingly temporary residences or a lack of land rights can lead to a lack of conservation of natural resources. Although conducted outside of the archipelago, this may provide interesting insight into the ways in which mangrove systems are valued as resources and thus settled within. It also addresses the relationship between social and economic factors and environmental impacts. Newing (2009) describes the impact of temporary communities on mangrove health, but fails to discuss the social impacts of these communities or the reasons in which they exist. This understanding is important for this study, as it hints at the ways that social uses and economic impacts can affect the environmental care for a particular ecosystem, helping to further contextualize relationships between industry, the environment, and people.

Guerrón Montero (2011) discusses the impact of international development of the archipelago on the Afro-Antillan population and the impacts of tourism development on the culture and lifestyles found in Bocas town. The work also documents the rise of tourism in Bocas del Toro and the transition from banana production into an economy founded on tourism (Guerrón Montero, 2011). However, Guerrón Montero does not address the impacts of urbanization on indigenous communities in the area, or the ways foreign investment contributes to and influences patterns of migration and settlement. The World Bank has evaluated the possibility of tourism to address poverty in Latin America, and more specifically has applied these theories to the rural, indigenous communities of Panamá (Klytchnikova and Dorosh, 2012). They acknowledge that the benefits offered by tourism depend on how the economy is structured and where money is spent (Klytchnikova and Dorosh, 2012). However, this evaluation does not address the creation of urban mangrove neighborhoods, like La Solución, and how this process

intricately links the environment, people, and the tourism industry through the commodification of the environment. Without understanding how the tourism industry widens the neo-colonial metabolic rift, it is impossible to assess the ability of tourism to address the issue of poverty in Panamá and contribute to environmental preservation.

Spalding (2013) also documents the rise of tourism and foreign investment in Bocas del Toro, focusing on the environmental impacts of the shift, namely the ways in which mangrove ecosystems changed in coverage. Spalding attributes this “foreignization of space” to the growing number of lifestyle migrants in Bocas del Toro and highlights how this shift has affected the uses of natural resources in the archipelago. This work is important as it deals with a specific type of foreign investment and development: construction of houses for settlement purposes. Spalding argues, “Material or physical interactions, influenced by these idealized perceptions of the local, include explicit actions and behaviors by foreigners that contribute to shifting existing relationships within local communities and to altering the natural landscape (Urry 1995, Bury 2005, Kull et al. 2007),” (2013:182). Here Spalding lays out some common connections between the environment and humans in Bocas, and the ways in which they are governed by the commodification of both the environment and the tourist perception of Bocas.

Lacerda and Schaeffer-Novelli (1999) address the economic trends that often lead to the deforestation of mangroves for creation of land, but fail to discuss the social implications of this migration. They make important suggestions for conservation of land and acknowledge several human uses of the mangrove habitats, but none of these address the use of mangroves as locations for communities. Thus the recommendations made for sustainable development and conservation of mangrove ecosystems cannot be broadened to areas like Bocas del Toro where the uses of mangrove ecosystems are inherently more embedded within the social context of the

area due to their residential use. Lacerda and Schaeffer-Novelli (1999) discuss the economic motivations to utilize space occupied by mangrove habitats in Latin America, but this study occurred right at the beginning of the rise of the tourism industry in Bocas. This study, therefore, assessed the social systems at work in mangrove communities, creating opportunity for a better understanding of how to conserve mangrove ecosystems without disadvantaging and displacing those residing in mangrove communities.

To understand the environmental impacts of colonialism and capitalism to fully understand the ways in which the neo-colonial metabolic rift has manifested in Bocas del Toro, and La Solución in particular because of its situatedness in a mangrove ecosystem, we need to understand the management of marine resources in Panama. Suman (2002) writes that there is little intersection between the organizations designed to do this work. He highlights the need for stronger institutions and recommends more frequent communication in between the different government entities that are designed to do this work. Suman (2002) recommends reform in terms of the Environmental Impact Assessment and argues that many of the laws intended to strengthen the government's ability to manage marine resources have further confused the subject. This is important when considering the action that the Panamanian government may take in mangrove communities to protect the habitats from pollution and degradation. Understanding the ways in which the government works to address environmental issues and the lack of a social aspect in this process will greatly influence how the government responds to population growth in mangrove communities on Isla Colón.

Although there has been considerable research done that considers migration and settlement patterns, little has connected this work to issues of sustainable development and the ways in which vulnerable communities have been marginalized via the neo-colonial metabolic

rift. Little research has been done in the Bocas archipelago in particular that looks at mangrove communities and their relationship to the foreign investment and tourism development that is ongoing on islands around the archipelago. This study helps to fill a gap in the literature by illuminating the relationship between the tourism industry and the environment through the lens of La Solución. This allows for a better understanding of the ways in which foreign investment is both harmful and beneficial to local populations.

Methods

This description of the methodologies used to gather and analyze this data aims to demonstrate both the limitations and the successes of this project. It is my hope that understanding how this project was conducted will allow the reader to better understand the conclusions I've drawn, the biases and positionality this project emerged from, and generally how this project came to be. This project aimed to understand the manifestations of the neo-colonial metabolic rift in Bocas del Toro, Panamá through the lens of La Solución. Initially, five research questions were used to address the broader aim of the study: (1) What is the history of foreign investment in the area? (2) How has the land history of Isla Colón influenced migratory patterns? (3) What are the reasons that people have moved into mangrove spaces? (4) How has La Solución changed over time? (5) How has the development of Bocas town impacted the development of mangrove spaces (i.e. construction in mangroves, filling in of mangrove spaces, deforestation of mangroves to create space for building)? Later, the trend of the study shifted to better understand the relationship between the geography of Bocas town and La Solución as spaces connected by environmental degradation and foreign investment, namely the tourism industry. The themes of the interview then turned towards understanding the roles of the tourism

industry in Bocas del Toro and evaluating perceptions of the tourism industry.

These research questions focused the study and better helped to connect migratory patterns in mangrove spaces with patterns in foreign investment and development of tourism in the archipelago. Utilizing a sustainable development framework that addresses the social, environmental, and economic intersections of development helped to evaluate the development of mangrove spaces (Haque 2000, 4). A sustainable development framework helped to analyze the environmental concerns of mangrove settlements, the economic factors that concern people living in mangroves, and the social issues that lead to settlement in mangrove habitats.

The study aimed to assess the migration into mangroves in conjunction with the research project's larger aims to evaluate the political ecology of mangrove development. This research addressed how the creation of neighborhoods in mangrove spaces coincided with both ecological conservation concerns and the politics of tourism development. Interviews were conducted in two phases, in November and December of 2016 and then again in December of 2017. Speaking to both outside experts, such as historians and biologists, government institutions like Autoridad Nacional de Ambiente (ANAM) and Autoridad de Recursos Acuáticos de Panamá (ARAP), and environmental advocates in the region helped to understand both the historical aspects of the mangrove communities and their development. Interviews with 24 community members served to better illuminate the perceptions of tourism and La Solución. Interviews were also conducted with business owners, tourists, and those working at various businesses within the tourism industry. This qualitative data was used to support and compare with the information from interviews with experts. Two focus groups conducted in 2016 with 9 community members in total were used to get a better understanding of how mangrove spaces were originally developed and helped gather a larger number of personal perspectives over the course of the study.

While the conversations conducted in 2016 tended to be more structured interviews, the conversations conducted in 2017 were more informal and surrounding particular themes, rather than following a strict script of questions. The conversations conducted in 2017 were influenced by the conversations with a purpose methodology laid out by Burgess (1988). This allowed conversations to take a less-structured path that was more influenced by the interviewee than the interviewer. The conversations conducted in 2017 also focused on the role of tourism in the region and were largely conducted with business owners, tourists, or employees at tourism industry locations. The interviews conducted in 2016 consisted largely of conversations with residents of La Solución and interviews with government personnel who were involved in the regulation of mangrove spaces. Additionally, the interviews conducted in 2016 were done under the supervision of Boana Visser, at the time a teacher at School for Field Studies Tropical Island Biodiversity Studies, and completed with two other students studying at SFS. The interviews conducted in 2017 were done without direct supervision but with the advisement of Professors Pinar Batur and Light Carruyo at Vassar College. The interviews conducted in 2016 were initially part of a much smaller research project and were re-coded and re-analyzed for this project. Ultimately approximately fifty interviews and focus groups in total were conducted and coded for this research project.

The personal framework with which I have approached this project is one of subjectivism (Gray 2004). I am of the belief that it is impossible to be completely objective while conducting social science research and that it would be impossible to separate my bias entirely from the work that I'm doing (Gray 2004). Both my personal experiences and identity likely played a subliminal role in the ways I chose to organize, conduct, and analyze this project. Thus my age, gender, race, and other identities probably affected the ways in which I was perceived by

participants and how I analyzed the data I received. It is important to note that who I am as a researcher and as an individual have likely impacted this project and allowed me to present my perception of what I observed.

The data was analyzed using an inductive coding process (Thomas 2006). Four themes were identified within the interviews, tourism and foreign investment, mangroves and the environment, land use, and migration. This coding process was used across all types of interviews and focus groups. When conversations were more informal and did not lend themselves to a recording or the interviewees requested to not be recorded, notes from the interview were coded in the same manner as the interview transcripts. The surveys were simply sorted into different categories in order to quantify the data.

There were limitations to the research, although the time span of the research was likely the most restrictive. Having only two weeks in 2016 and one week in 2017 to collect data severely limited the number of interviews and focus groups we were able to conduct. This small sample size may have influenced the scope of perspectives and opinions that we heard over the course of the project. These may have also been influenced by the identities of the researchers as well. Additionally, it is difficult to differentiate between what participants may be saying simply by nature of who the researchers are and what the participants' true opinions are. It is important to note the ethical concerns of the study and the paramount importance of maintaining the anonymity of all the subjects. It was important for researchers to acknowledge their privilege in order to attempt to limit the power dynamics usually present in research. By explaining the project thoroughly and introducing themselves, researchers gave participants full knowledge of the project and the opportunity to withdraw participation at any time. Researchers also refrained from asking questions that were deemed culturally inappropriate or had the potential to make

participants uncomfortable. It was also important to make sure that participating in the study would not adversely impact the communities and individuals studied. This was done by using neutral language during interviews so as not to create an opportunity for participants to feel judged. Additionally, it was important to consider the wellbeing and wishes of the communities and the participants when making policy recommendations for Isla Colón.

Conclusions

This thesis seeks to interrogate the relationship between humans and the environment in Bocas del Toro, Panama through the theoretical lens of the neo-colonial metabolic rift. The first chapter establishes a number of theoretical perspectives that resonate with circumstances in La Solución and Bocas del Toro that help to explain the intersections of the environment and the tourism industry as they impact people. Concepts like socioecological inequality, the ecological bubble, and the unintended city are established in chapter one before they are revisited later in the thesis (Pellow 2014, Pattullo 1996, Sen 2009). Chapter two discusses the creation of La Solución, a brief history of Bocas del Toro, and the ways in which residents of La Solución perceive the tourism industry and their neighborhood. This chapter is crucial because it demonstrates the degree to which the logics of the neo-colonial metabolic rift are embedded into the creation of the neighborhood while centering the experiences of residents of the neighborhood. Chapter three builds on this understanding of La Solución in thinking about the relationship between the tourism industry and the neighborhood, and later the relationship between the tourism industry and the environment. It interprets the perceptions of tourists and business owners to better understand the ways in which the neo-colonial metabolic rift is central to the tourism industry in Bocas del Toro. The final chapter pulls together the theoretical

arguments made in the previous chapters and puts them in conversation with the calls for change from residents of La Solución. The last chapter aims to think through the opportunities for social change and how residents can best harness their innate understanding of the forces at work in La Solución and Bocas del Toro to advocate for themselves throughout the relocation process.

The relationship between humans and the environment was first interrupted by colonialism, which led European whites to think of people of color and nature as a raw material to be consumed and a means of amassing capital. Later, under the terms of neo-colonialism and exploitation, the relationship between people and the environment was altered again as the economy turned towards the tourism industry and specifically the trend of ecotourism. This new relationship, the neo-colonial metabolic rift, meant that the economy depended on the commodification of the environment as something to preserve and experience. The metabolic rift is the, “irreparable rift in the interdependent process of social metabolism,” (Marx 1981:949). This can be applied to the relationship between people and the environment and how this relationship is disrupted by capitalist tendencies that threaten and destroy the environment, and how the neo-colonial metabolic rift necessitates the oppression of people of color along with their environment. The ways in which humans are relating to the environment is thus fundamentally changed by the commodification of the environment. The commodification of the environment, along with the bodies of people of color, is hyper visible in the tourism industry where those driving the industry imagine that they are producing the nature they are “selling” to consumers, thus changing the ways in which all participating in the tourism industry in any capacity are fundamentally relating to the environment.

This is prominent in La Solución where large scale environmental degradation is happening to landscapes folks living there know are important. However, the residents of La

Solución have no other available space that allows them geographical access to schools, jobs, and other institutions that provide some semblance of support due to the infringement of tourism upon land and the ways in which tourism and other colonial forces have drastically altered the availability and cost of land. Therefore, consumption of the environment in La Solución is both hegemonic and counter hegemonic. Folks are living on untitled land in houses without access to public infrastructure like running water or a sewer system. Residents of La Solución are thus subverting the boundaries put in place by tourism and the guidelines for land ownership put in place by colonial governments. However, the residents are simultaneously participating in the tourism industry via their occupations and utilizing the location of La Solución as a way to access infrastructure like the high school or the hospital. Ultimately, this neo-colonial metabolic rift places limitations on how the geography of La Solución can be shaped and how land use is legitimized based on capitalistic ideals. Profits in Bocas del Toro are no longer driven by the production of banana plantations, but rather by the preservation of the nature for tourist consumption. The tourism industry in La Solución, as part of a larger alienation of humans from the environment, has created the need for a location like La Solución that allows folks to both subvert the boundaries of capitalism but simultaneously benefit from an industry of consumption. The question now becomes how residents of La Solución, and Bocas del Toro more broadly, can navigate the neo-colonial metabolic rift between humans and the environment amid the growing tourism industry and their changing relationship to nature.

Chapter 1: Geographies of Bocas

This chapter puts La Solución and Bocas del Toro in conversation with other theorists thinking about the intersections of tourism, land use, geography, and foreign investment. Understanding how La Solución and Bocas del Toro fit with other understandings of the tourism industry, environmental racism, and the unintended city can be useful in thinking about the manifestations of the neo-colonial metabolic rift between the two places, but also within La Solución. Moreover, putting Bocas del Toro aside theoretical works spanning the globe can help to locate geographically and theoretically the distinct concerns of the tourism industry in Bocas del Toro within the global conversation about the tourism industry. The works and arguments of David Pellow, Jai Sen, Michelle MacCarthy, Polly Pattullo, and Carla Guerrón-Montero are helpful in that they explore the complexities of the economic benefits of tourism, the relationship between environmental harm and tourism, the impacts of tourism on local communities, and the impacts of tourism on the cultures of communities and subcommunities. Ultimately, these theories have helped to create a better understanding of the ways in which La Solución is an unintended city situated within the ecological bubble of Bocas del Toro (Sen 2009; Pattullo 2005). This contributes to the ways in which the residents of La Solución are marginalized within the geography of Bocas del Toro but also necessary to and benefitting from the tourist economy. These theories are useful in thinking through the future impacts of the relocation of the neighborhood of La Solución and the ways in which populations have access to change the geographies of the space they occupy. Their work lends itself to an exploration of the ways in which the neo-colonial metabolic rift have manifested in La Solución to create a specific oppression of people of color and the land they occupy.

Socioecological Inequality

In *Total Liberation*, David Pellow argues that in order to understand inequality, we need to think about the relationships between humans, nonhumans, and ecosystems. He writes, “Socioecological inequality underscores that humans, ecosystems, and nonhumans are intertwined in the production of inequality and violence and that relationships that might privilege humans in the short run may also place them in jeopardy in the long term,” (Pellow 2014:7). Here Pellow argues that ecosystems are inherently present in the ways that inequality is enacted in society and that often when certain populations suffer, the ecosystems they occupy likely become marginalized as well. Additionally, Pellow highlights the importance of considering the long-term effects of ecosystem damage and the ways in which this will ultimately place humans at risk in the future as the ecosystem becomes unable to support them. This is applicable to the neighborhood of La Solución, particularly because of the roots of the mangrove trees that the neighborhood is built upon. Without a few trees at the perimeters of the neighborhood and roots to hold together the filled-in sand, the neighborhood would be even more vulnerable to natural disasters, strong winds, rising tides, and other natural phenomena. However, as more and more houses are built in the neighborhood, more mangrove trees are cut down to create more livable space. High tides already make paths through the neighborhood flooded with the dark, polluted water surrounding the houses and mangrove roots, a problem that will only be made worse by increased frequency of natural disasters and rising sea level. Ultimately, Pellow’s argument that our notions of inequality need to encompass ecosystems as a tool and as a site of inequality is highly relevant to La Solución, a site of inequality and also an ecosystem suffering because of inequality.

Pellow argues, “Your elevation above others also means that your life is of greater value

than others living within that social system. You likely own or control and affect more of the planet and its constituent ecosystem than others, you likely own or control and affect more living beings (and therefore likely produce more death) than others, and you likely control and benefit from the ideational systems that give meaning and legitimacy to such dynamics,” (Pellow 2014:6). Here Pellow illuminates the ways in which power can be demonstrated through the use of land and the access one has to ecosystem resources. This theoretical understanding is important to think about in conjunction with the structures of power in Bocas del Toro. Those controlling the tourism industry have this control over the planet and the ecosystem, as well as other living beings. This responsibility to preserve the ecosystem and to protect other living beings from death as much as possible falls upon the local government of Bocas del Toro and the regulating agencies of the tourism industry. In La Solución, residents have little control over their ecosystem, and beyond that have little control over how much longer they’ll be living in the neighborhood among the mangroves. Those decisions, and the ways residents of the neighborhood treat the surrounding ecosystem, are not necessarily theirs, due to the lack of infrastructure to support residents living in the neighborhood and the laws against titling mangrove land that keep the neighborhood from becoming legally legitimate. Thus, Pellow’s theory of socioecological inequality is useful for thinking through the social systems and geographies in La Solución and Bocas del Toro, as well as the relationships between the residents, the local government, the environment, and the tourism industry.

Environmental Racism

In *Resisting Global Toxics* Pellow theorizes about the practice of environmental racism. He argues, “Ecological disorganization and environmental inequality and racism are therefore

fundamental to the project of modern nation building. The extension of unearned privileges to certain groups and unfit disadvantages to ‘others’ in the context of the systemic manipulation and exploitation of nature is a defining feature of modern nation-states,” (Pellow 2007:5). Here Pellow ties environmental racism to the goal of modernization. This theoretical understanding of how environmental racism is used as part of the modernizing project is crucially important as the tourism industry continues to be seen as a way for countries in the Global South to grow their economies. His concept of environmental racism is important for thinking about La Solución as a specifically relegated space in Bocas del Toro and the ways in which the neighborhood and its residents are marginalized together. Additionally, Pellow illuminates the possibility of La Solución as a space marginalized using the justification of modernization.

The Unintended City

The degree to which La Solución is a neighborhood built on government land without government permission is something crucially important to thinking through the ways in which the neighborhood relates to other geographical spaces of Bocas. In many ways, La Solución can be considered an unintended city (Sen 2009). Jai Sen writes, “Formal economic, planning and governance structures and systems used them and their labor but had no real place for them,” (Sen 2009:17). Sen’s concept of the unintended city applies to La Solución, where the labor of residents is crucial for the tourism industry but their wages are not enough to have a place to stay legally in Bocas or to travel back and forth from their homes on other islands. These circumstances bred the necessity for a neighborhood like La Solución where residents could simply build a home with whatever materials they had available or could afford. Sen also speaks about unintended cities as sites where infrastructure is unavailable to residents, something seen

drastically in La Solución where potable water and electricity are hard to come by. Sen's analysis of unintended cities in Calcutta, India often described the cities as being located alongside infrastructure necessary for the survival of the larger city. This, too, can be seen in La Solución where the neighborhood exists alongside the runway of the small international airport, infrastructure crucial to the tourism industry and economy of the Bocas del Toro archipelago. Thinking of La Solución as an unintended city can help to think about the relationship between the local labor economy and the residents of the neighborhood. The unintended city explicitly links La Solución with tourism, acknowledging the complexities of the relationships between the seemingly separate geographical spaces.

Tourist Sites and the Mundane

While considering La Solución an unintended city helps to put into context the intricate relationships between La Solución, the tourism industry, and its residents, Michelle MacCarthy's *Making the Modern Primitive* can help to better understand the ways in which the main street of Bocas town and the surrounding tourism hub has been set aside as a demarcated space. MacCarthy discusses reimagining local values in a global context (MacCarthy 2016). Using the Trobriand Islands as a case study, MacCarthy teases apart the ways in which culture and authenticity are impacted by the tourism industry. This is helpful for thinking through the ways in which culture is deemed authentic or not, and the ways in which culture may be performed in Bocas del Toro. Thinking about the constructions of culture and performances of culture is also useful in thinking about the juxtaposition of the main streets of Bocas with the neighborhood of La Solución. MacCarthy's concept of authenticity as something both constructed and decided is useful for understanding how local residents consider La Solución and how tourists are

considering the neighborhood in comparison to the main streets of the town. The quest for authenticity in tourism is also important for understanding the ways in which tourism sites are constructed as sacred and how culture is commodified within the tourism industry. MacCarthy argues, “Culture is made real through contrast, is always an invention, and is relational between self and other,” (MacCarthy 2016:11). MacCarthy’s understandings of culture can help to make sense of the ways in which culture is used to sell the location as a paradise and as authentic.

The Ecological Bubble

When thinking of tourist destinations and the ways in which they have adapted to become suited to the tourism industry, it is useful to consider the environmental implications of this shift. In Bocas del Toro, there are a number of ways in which the environment has changed due to the demands of tourism. The area has been overfished, meaning that now restaurants wanting to serve fish to tourists are often importing the fish they are preparing. In *Last Resorts: The Cost of Tourism in the Caribbean*, Polly Pattullo quotes a participant in her work, “Our tourism product is our environment. We therefore destroy our environment at our economic peril,” (Pattullo 2005:131). Using the concept of the ecological bubble, the idea that the tourist areas must be up to Western standards, we can look for the ways in which the ecological bubble is harming local communities in Bocas and the environment. We can stretch the concept of the ecological bubble to also think about the degree to which spaces are being inhabited by restaurants that are too expensive for residents of Bocas to eat at, or that serve food that residents are not interested in eating. The ecological bubble also holds residents of Bocas responsible for the environmental actions of the tourism industry and impacts the resources available for consumption by local communities. The concept of the ecological bubble moves beyond its original intent of

examining the ways in which environmental resources are stretched to create a space for tourists to exist in that draws beyond the environmental limits of the area.

Environmental Rights

Feminist Political Ecology (1996) illuminates the degree to which environmental rights are gendered. This is critical to think about in Bocas del Toro where the domestic sphere and the public sphere are still gendered and the division of labor is gendered as well. When thinking about environmental racism and the ways in which individuals and communities are marginalized via their environment, *Feminist Political Ecology* stresses that women's experiences with the environment are different than those of men and contribute to different societal structures and specific oppressions. This theory casts rights of renewable use as available for women, while rights of consumptive use are geared towards men. These distinctions in the rights of men and women to utilize their landscape build on the ways that women are typically characterized as empathetic and allowed to take up less space than men who are encouraged to consume in a way that women are not. This plays on the idea that women are more directly connected to the Earth and that they are responsible for taking care of the family and the environment in a way that men are not. Knowing these rights as gendered is useful in thinking through dynamics of the environmental rights afforded to tourists versus those afforded to local residents. This theoretical base is helpful in reading the ways in which tourists are speaking about the environment in La Solución versus the ways that local residents are speaking about the environment, and where each group is placing the burden of environmental care. This is seen in the ways in which use of environmental resources was justified for the United Fruit Company in ways that it still is not justified for the Ngäbe communities in Bocas del Toro. In many instances

tourists place the burden of environmental care on local communities, reflecting similar power dynamics and environmental rights as the gendered distinctions *Feminist Political Ecology* describes. Thinking through socioecological inequality through a feminist lens can help to illuminate other ways in which the burden of environmental care is unequal.

Conclusions

These theories are foundational for thinking about the relationships between La Solución and Bocas town, as well as the relationships between tourists and residents. Understanding the ways in which La Solución and Bocas town are part of a larger system of environmental racism and socioecological inequality is useful for thinking through the location of La Solución within a larger global context and as a microcosm of the ways in which tourism industries impact local communities. These theories help to illuminate the problems of the tourism industry in Bocas del Toro and the ways that the industry stays true to larger systems of oppression and contributes to environmental degradation in the region. The works explored above each speak to a different aspect of the neo-colonial metabolic rift and present different opportunities for how this larger theory can be applied and conceptualized in La Solución and Bocas del Toro. They raise questions about the ways in which the tourism industry has shaped the geography of Bocas del Toro and how the growth of the industry will continue to impact Isla Colón. Thinking alongside these theorists have led to much bigger questions like how a perspective of socioecological equality be applied to reform and regulate the tourism industry in a way that centers the experiences of local communities of people and animals.

Pellow's understanding of the relationship between the environment and people is useful for thinking through the ways in which the oppression of folks of color and the environment are

linked, something crucial to understanding in conjunction with the understanding of the neo-colonial metabolic rift as creating a distinction between people and the environment. Sen's work gives name to the process that created La Solución, and brings a geographical and spatial context to the neo-colonial metabolic rift. MacCarthy's explorations of the impacts of tourism on culture are crucial for thinking through the ways in which the neo-colonial culture of Panama has led to the creation of La Solución. Pattullo's work concerning the ecological bubble helps to put the neo-colonial metabolic rift's understanding of the environment in the context of the tourism industry and the ways in which pockets of the environment are earmarked for different treatment because of their relationship to the tourism industry. *Feminist Political Ecology* highlights the importance of considering gender in any understanding of environmental degradation. Together these theories and case studies elaborate on the neo-colonial metabolic rift pushing it to better connect the tourism industry, environmental degradation, and multiple oppressions to better represent the case study of La Solución.

Chapter 2: The Creation of La Solución

Using the theoretical concepts discussed in chapter two, this chapter aims to explore the forces of capitalism and the environment have led to the creation of La Solución as an urban mangrove neighborhood. An understanding of the role of foreign investment in Bocas del Toro is necessary to put into context the ways in which mangrove habitats have historically been utilized and valued in the area. A discussion of the growth and future relocation of La Solución within a mangrove habitat also necessitates a conversation about how residents of the neighborhood think of the environment and land use in the neighborhood. Finally, the chapter explores local perceptions of tourism, and the ways in which residents of La Solución locate themselves in relation to the tourism industry. This chapter locates La Solución at the center of intersections between the tourism industry, the environment, and people to illustrate a specific manifestation of the neo-colonial metabolic rift in Bocas del Toro. The neighborhood speaks to the distancing of people from nature, and the prominent role that capitalism, in the form of the tourism industry, has played in this separation.

'Foreigners' and Mangrove Habitats

In Panama, the settlement of expatriates from other countries is encouraged using legislation created by the federal government that establishes tax breaks and business benefits for those who have come from elsewhere to start a new life in Panama. This is seen especially through the creation of 'tax free zones' and benefits for leisure settlers, such as retirees. These 'free zones' were established after the creation of Panama's National Tourism Council in 1983 and exist as places around the country where starting a new business is cheaper and easier

(Jackiewicz and Craine 2010: 15).¹ This leads to the saturation of certain spaces with businesses run by foreigners directed towards foreigners. One of those zones includes the Bocas del Toro archipelago. Isla Colón, in particular, has a fairly extensive tourism area, complete with scuba diving instructors, restaurants, hotels, tour boats, etc. all directed exclusively towards use by tourists. The success of tourism businesses in Isla Colón has only increased the expansion of the tourism industry in the area, both via business growth and increased visitors each year.

Tourism has a long and complicated history in Isla Colón, one that begins with the United Fruit Company. The first hotel in Panama, the Gran Bahia, was used first as the offices for the United Fruit Company from 1905 to 1968, when it was converted into a hotel (Gran Bahia website). In fact, the entire geography of the island changed under the influence of the United Fruit Company. When the United Fruit Company first came to the town of Bocas, the shores of Isla Colón were largely mangrove habitat, something the company deemed swampland. Ultimately, the area that was formerly mangroves was filled with sand, expanding the size of the town and the habitable area. This process was widespread and resulted in a drastically different geography of Isla Colón. However, due to the increasing demand for land during the banana boom and the desire to eliminate diseases in the Bocas archipelago, mangroves were cut and filled to make more room for people to live and to prevent the spread of mosquito-borne illnesses like malaria (Upham Adams 1914). The campaign to rid the island of mosquito-borne diseases was successful; it is very unlikely to contract malaria in Bocas, which deemed the area more habitable by Western folks, as the United Fruit Company intended. Where the United Fruit

¹ Jackiewicz and Craine identify a specific real estate company, International Living, to be a major player in the push for the creation of 'tax free zones' in Panama, demonstrating the extent of the influence of foreign investment in political and environmental affairs. Bocas del Toro falls under the Bastimentos zone which is identified as having 78 tourist attractions. For more information on the relationship between Panama's economy and foreign investment, see Jackiewicz and Craine's "Destination Panama: An Examination of the Migration-Tourism-

Company cut and filled the mangrove habitat now stand the main streets of Bocas town, where the majority of the tourism industry is congregated. In this way, before tourism was even part of the history of Bocas, foreigners were already shaping and altering the geography of Isla Colón. Ironically, earlier pictures of Bocas del Toro depict houses on stilts above the mangrove roots, similar to the current construction of La Solución (see Appendix B. Photos 4 and 5).

The deforestation of Bocas is significant in that it represents one such way that foreigners in Bocas value land; it is valued for its building capacity, rather than for the environmental benefits that mangrove habitats provide. The cutting and filling of mangrove habitats made Isla Colón more vulnerable to rising sea levels, flooding, storm surges, and erosion, among other environmental hazards.² After the neighborhood of La Solución is relocated to the inland location it is unclear what will happen to the mangrove habitat the neighborhood previously occupied, though it is complicated by the establishment of mangroves as protected habitat³s worldwide (ICUN 2010). Now that the tourism epicenter of the island has largely been cut and filled, mangroves are protected, preventing similar uses of mangrove habitats by Panamanians looking to move to Isla Colón (Interviews with ARAP, ANAM, and municipal government lawyer 2016). If mangrove lands are unable to be titled and unable to be cut and filled due to their ecological importance, Panamanians are completely restricted from using the habitats in the same ways as foreigners did when they altered the geography of the island and the acceptable ways of using land. The United Fruit Company, now Chiquita, still operates in Panama with

Foreign Investment Nexus.”

² For more information on the ecological importance of mangroves to both humans and fish, and conservation strategies currently utilized in Panama see Cienfuego and MacInnis’ “An Analysis of Mangrove Conservation and Land Use Management in the Pablo Arturo Barrios Wildlife Refuge,” (2015).

³ Mangroves as protected habitats – when did mangroves become protected or first acknowledged as ecologically important? Legislation in Bocas that protects mangroves, prohibits mangrove land from being titled

production now based on the mainland in Almirante and is still profiting from actions taken earlier in Panama's history that guaranteed them land access. Thus, Panamanians are still limited by the environmental actions of the United Fruit Company, and later the growth of the ecological bubble created by the tourism industry (Pattullo 1996). The ways in which it is physically possible to utilize the land and the ways in which it is acceptable to use the land were both inherently shaped by early environmental actions taken by the United Fruit Company and other foreign investors.

Tourism comes to the shores of Isla Colón

The process of changing geographies and acceptable modes of land use only continued as the tourism industry gained influence in Bocas del Toro. As tourism became popular in Costa Rica, historians of the region note that Costa Rican tourism spread into the Bocas del Toro archipelago. Over time, Bocas became a place tourists visited in its own right, not just as an extension of their Costa Rican vacations. Both prominent historian of the area Clyde Stephens and hotel owner Tito Thomas identify the promotion of Bocas del Toro by Costa Rica as a way to extend their tourism as primary reasons for the spread of tourism into Bocas del Toro. In fact, Thomas specifically identifies the first tourism investors in Bocas as Europeans coming from Costa Rica.

Clyde Stephens, also a former United Fruit company employee and resident of Bocas del Toro, attributed the lack of tourism in the 1960-90s to the government of Omar Torrijos, saying that foreigners did not feel comfortable coming to Panama while the country was under military rule.⁴ He argues that tourism in the region did not take off until Manuel Noriega came into

⁴ Omar Torrijos came to power via coup d'état in 1972 when he held and created the office of Maximum Leader of the Panamanian Revolution. During his rule, Torrijos pushed for Panama to

power, a coup imposed and enforced by the United States.⁵ By 2000, Bocas was a booming tourist town, Stephen notes. He is disdainful of the way the tourism industry has grown in Bocas: “There was no control anymore, no community planning, no tourism planning. That’s the reason you have the waterfront the way it is. People walking down the street may not even know there’s water there because you can’t even see it.” In both a physical and emotional sense, the tourism industry has distanced people from the environment, widening the neo-colonial metabolic rift.

Now, Bocas is a destination for surfers, scuba divers, and those interested in an ecotourism experience.⁶ However, government environmental regulation agencies like Autoridad de los Recursos Acuáticos de Panamá (ARAP) and Autoridad Nacional de Ambiente de Panamá (ANAM) place some blame on foreigners for loss of certain habitats in the region and general environmental degradation within the archipelago. One official from ARAP compared the needs of foreigners with the needs of indigenous people in the region when speaking about the loss of mangrove habitats. He believes that indigenous populations are consuming significantly less than foreigners in the region, and declares that mass destruction of mangrove habitats is largely the fault of foreigners.

“If you see an affectation from a plane you realize it’s a foreigner when you see from the

gain sovereignty of the Panama Canal from the United States. The Torrijos-Carter Treaties in 1977 gave Panama full control over the Canal by 1999. Torrijos did not live to see the product of his treaty; he died in 1981 when his plane crashed. There is speculation that Torrijos’ death was part of an assassination plot by the United States, but this was never confirmed. Prior to his death Torrijos had stepped down and was succeeded by Aristides Royo.

⁵ Manuel Noriega came into power in 1983. He worked alongside Omar Torrijos during his rule, but also worked closely with U.S. intelligence agencies. He was later captured by U.S. intelligence forces following the U.S. invasion of Panama in 1989 on charges of money laundering and drug smuggling. These political intricacies demonstrate the extent to which the relationship between the United States and Panama was one of colonizer and colonized.

⁶ For the purposes of this paper ecotourism can be defined as tourism that markets itself as having a lesser carbon footprint or environmental impact than traditional forms of tourism. Additionally, ecotourism can also be identified as tourism with a specific focus on appreciation of the environment.

land. It's someone from another country because they don't have more places to build on the beach. They get in the mangroves and take sand from the beach to make their private beach. All affectations are made by foreigners. They're not used, people just cut them down to make space and to take sandflies away. They cut a part of them to make the place more windy and the tree dies. All direct affectations are done by foreigners.”

The ARAP official argued specifically that the use of mangroves by foreigners is solely for aesthetic purposes, uses of mangroves that are never associated with local populations. He also highlights a misunderstanding many foreigners have about land in Bocas more generally.

Though the islands are located in the Caribbean Sea, there are not as many white sand beaches as generally is expected; instead mangrove habitats prevail, meaning that foreigners generally remove mangroves from the shores in order to create the white sand beach they perceive as the natural and correct use for the land. This is a fundamental misunderstanding of the ways in which the ecological systems operate in Bocas, and a willingness to drastically alter geographies until they meet unrealistic expectations. Here, we see a distinction between the perceived relationship between the environment and foreigners and the perceived relationship between the environment and local populations. This perception of the environment also ties into the concept of the ecological bubble, with tourists creating the environmental conditions they are used to instead of understanding the environmental conditions that are natural and sustainable for the ecological habitat they are in (Pattullo 1996). The ARAP official specifically noted the priorities of the foreigners as examples of how his perception of their land use differs from the land use of local populations. The official also sees having to control the pace of building as something associated with foreign investment.

“Yes, a huge decrease [in the quantity of permissions given for touristic processes], not because there's no more tourist. It's because we have no more place to construct. We had to slow it down. There can not be more people in Carenaro. You can't build on the coast of Bocas anymore. There'll be building with 5 or 8 floors soon that shouldn't be allowed.”

Here, the official notes that one of the key restrictions for land use in the area is the simple limitation of space afforded by a small island. The official fears that the limitations of space will only invite foreign investors and the tourism industry to build taller buildings to compensate for the lack of available space. This also represents an environmental concern that exists largely due to the role of foreign investment in the region. Again we see the presence of an ecological bubble, with foreign investors assuming that the land can support taller buildings because of the over-consumptive Western standards they are accustomed to (Pattullo 1996). Without foreign investors and the tourism industry there would be no need in Bocas for buildings with more than 5 floors. Here we see a connection between the tourism industry and changing use of land. It also represents a changing geography of the island in which the skyline will be drastically altered by the presence of these buildings. The environment is reaching its capacity for supporting tourism on Bocas del Toro but the industry is not limited by the environmental capacity of the island and likely will continue to grow, altering both the ecological habitats and the geography of Bocas as it does. The social implications of this lack of space for the tourism industry to grow can be seen quite clearly in the creation of La Solución. With continued demand for employees but no affordable housing nearby, an alternative living situation became necessary.

A municipal architect for the archipelago notes that requests for building permissions have increased. He relates this somewhat to his role in making permissions more required in the building process. He explained, “It increases when I start asking for permissions. It was ignored before and the owners couldn’t sell the property because it didn’t belong to them. [...] The last year we gave 87 permissions. This year 120. It used to be like 70 before; I got 87 between May and December in the last year.” The municipal architect hints at a past of unregulated construction in Bocas, and acknowledges that though the number of building requests are higher

this year, this is not directly related to an increase in buildings. He does, however, acknowledge the difficulty in getting businesses to comply with asking for permission and the complexity of land use and regulation in Bocas.

Migration into La Solución

The changing land geographies of Bocas del Toro are directly related to foreign investment in the region, both in the form of the United Fruit Company and the tourism industry. As land became less available due to construction and more expensive due to foreign investment in the region, those looking to move to Bocas were left with fewer options. This is reminiscent of the idea of the unintended city in which residents were left with little available space to live except for the area bordering crucial infrastructure, yet their labor was crucial to the operations of the dominant industries of the city (Sen 2009). However, it is first important to understand why migration to Bocas was increasing. Satellite images from 2004, 2011, and 2015 illustrate an increasing number of roofs appearing among the trees of the mangroves (Appendix B. Photos 1, 2 and 3). These images demonstrate the natural evolution of the neighborhood and the how much the neighborhood has grown with the tourism industry. Residents of La Solución cite a number of reasons for wanting to migrate to Bocas. One resident who has lived in La Solución for 17 years talks about moving to Bocas and trying to find a place to live. She said, “When I arrived, nobody was here. There wasn’t a neighborhood. This neighborhood is about 10 years old. There was nothing. But there was no place to make a house. [...] Then, I wanted a place and everything was too expensive, there was only this. In this time, here it cost \$100 per lot. Now it has risen.” This quote is particularly interesting because mangrove lands cannot be titled (Interviews with ARAP, ANAM, and municipal government lawyer 2016). The resident is likely referencing a

corrupt government official who sold plots of land in La Solución at cheaper rates than were available in the center of town. This has led some residents of La Solución to think that they have purchased their lots and that they rightfully own their houses, although the politician was really selling land that can't legally be owned by anyone. Fernando, a lawyer who formerly worked with MOETAB and now works for the local government, explained how some residents of La Solución purchased false titles to their land:

Fernando: "You should get 200 meters of the mangroves then to build. Agraran law is more specific about taking mangles and holding property titles on them. That's why there cannot be property titles in La Solución."

Interviewer: "But some people have them."

Fernando: "Illegally, the government gave them the titles because the sea level is getting higher. Like 200 meters into the land. The only one allowed to give a title on them is the marine authority, they let you be on them or building piers or houses. If they got a title, it was illegal because you cannot get it."

Through Fernando's understanding of the titling process we can see how complicated the land rights process is in Bocas del Toro. Other residents talk about work as a main reason for migrating to Bocas and availability of space as the reason that they chose to live in La Solución. One resident who has lived in La Solución for around 10 years talked about coming to the neighborhood: "Okay I came here for my husband. Yes, him, for a job he came to live here. We came for a while, but didn't stay to live here." This is a common theme among La Solución residents; most are not planning on living in La Solución permanently. This temporary move reflects the reasons that people have come to La Solución. She goes on, "Because when we came, there wasn't work, there wasn't money, there wasn't anything to eat. And he came here, there's work for money. For work he came to La Solución."

Coming to the neighborhood generally reflects an urgent need, generally for money or to send children to school. Another resident who has lived in La Solución for 7 years said, “[I came] because there is a lot of tourism and that’s what we came to do and make money.” His friend who has lived in the neighborhood for 12 years agreed, “I came here to La Solución to live because I liked to see tourism. I came to work.” However, both residents agreed that they prefer to live on the coast of the mainland where they were born and that they hope to go back someday to live. One said he would go back when he was older, the other said he would go back when he “finds a girl.” For these residents, La Solución is not the place they are planning to live permanently, but rather a way for them to support themselves financially before they move back home to their communities.

For other residents, a move to La Solución happens because of access to infrastructure, like education and health care. One resident spoke about the reasons that her neighbors came to the area: “I know that some of them came from the coast so that their children could study.” Another resident added, “Many people make food so that their children can go to the school that’s close to the high school. Many came from these places so that their children could go to this high school or school and here they stay close because there they had to pay for transportation and it didn’t always reach us.” Through these interviews we can see that access to education is important, but also that transportation costs are of concern to residents. With low daily wages and boat taxis between islands usually costing at least 3 dollars, a significant portion of the money that residents would be making would end up being lost to transportation costs if they were unable to live on Isla Colón.

Government lawyer Fernando touched on something similar when asked what would happen to residents if the neighborhood was relocated. He explained, “It’d be a huge impact

because people here have their boats and everything, close to the main town, school. It'll economically affect because these people don't pay for a rent here, they have their small house here. They pay for power service as well as water service. It'd be difficult to leave." The location of La Solución is not just related to availability of space and land prices, migration into the neighborhood is directly related to transportation costs in the area and access to infrastructure.

The Ministry of Housing recently purchased land on Isla Colón where they plan to rebuild the neighborhood of La Solución. The location of the new neighborhood is located further inland and significantly further from the center of town. The Ministry plans to construct houses that residents of La Solución can then mortgage for between fifty and seventy dollars a month. Houses will be limited to six people and will all be leased under the names of the man of the household. The houses in the new neighborhood will be reserved for residents whose only residence is the one in La Solución. These policies demonstrate a fundamental misunderstanding about the neighborhood and why it came to be. A location further from the center of town raises the cost of living by forcing folks to find transportation into the center of town for work and for school. Limiting the size of households changes the amount of income of pre-existing households that are consist of more than six people. Perhaps the most life-altering policy of the new neighborhood is the addition of a mortgage to the expenses of folks currently not paying any rent at all. Fifty dollars a month would constitute a substantial portion of the income for a lot of the residents of La Solución, especially if the income of a household changes drastically because it is split up into multiple houses. For many folks, the new neighborhood might not even be available to them, as a lot of residents have houses on other islands or the mainland as well, which would preclude them from receiving a house in the new location. While the details of the new housing arrangement are likely still being ironed out and it is unclear when the construction

of the new houses will be complete, the relocation will surely have a drastic impact on the residents of La Solución. As the process of relocating La Solución unfolds, it will be crucial for the Ministry of Housing to be in constant conversation with residents of the neighborhood about their needs and how the new neighborhood can best support the residents.

After the neighborhood is relocated, it is up to the municipal government of Bocas del Toro to decide what happens to the former location of the neighborhood. This practice widens the neo-colonial metabolic rift by distancing the residents of La Solución from the land they used to occupy. Not only did the residents not get to vote on or choose if they were interested in relocating, but now the residents also have no say in whether the land is reforested or used to expand existing infrastructure, like the airport. This distancing of the residents from land they have lived on, for over twenty years in some cases, only serves to further commodify the relationship between land and people. By labeling the mangrove habitat as something to be taken from people and owned by the municipal government disregards the lives of other animals that occupy the same habitat. This commodification of land is exactly what Pellow argues is socioecological inequality. In the process of marginalizing the residents of La Solución via their forced relocation, the mangrove habitat and all the animals who need the ecological shelter are also marginalized by the commodification of this land. Ignoring this socioecological inequality works in tandem with the neo-colonial metabolic rift to further separate people from the environment in the name of capitalism, and more specifically the tourism industry.

Residents of La Solución and the Environment

The location of La Solución above mangrove roots and beneath the canopies of the remaining mangrove trees means that residents engage with the environment by living in the

neighborhood to varying degrees. Some residents are aware of the environmental importance of mangroves, and say they feel mangrove habitats should be protected. Other residents speak of the environment in terms of their relationship to nature, and specifically the ways in which the Ngäbe connect to nature. Residents highlighted a difference between “medioambiente” and “naturaleza” by choosing to use the terms at different times to explain different aspects of their relationships to nature. While “medioambiente” refers to the environment in a more scientific context, “naturaleza” more refers to the spiritual relationship that individuals and communities have with the land.

The founder of an organization called MOETAB to help indigenous families and communities in the Bocas del Toro province protect their land from foreign purchasers explained, “For us the environment of nature is as though everything is part of the human being. Many of us are born seeing nature, the river, the forest, and at the moment that we go to rest, we return to mother Earth.” Here, the founder of MOETAB connects the human body to how indigenous communities consider nature, implying that the environment is inseparable from the human body. He then went on to explain how conceptions of land use in La Solución are separate from other forms of land use in Bocas del Toro that result in cutting down mangroves. He noted:

“In La Solución there could be a small impact on the environment, very small, when you compare it to the great impacts of hydroelectric and marine or a businessman who wants to make a coastal highway or condos. It hurts, yes, but it’s of small scale for example in La Solución. And it’s not that they move to a place to make something commercial for themselves or to sell. Instead they do it out of necessity.”

Land use in La Solución is therefore justified by the reasons that people have come to the neighborhood and removed mangrove trees to create space to live. Because people have moved out of necessity and because their conceptions of their relationships to nature are very different

than that of foreigners, the environmental impact of La Solución is differently conceptualized and placed in comparison to the environmental impacts of the tourism industry and foreign investors. The founder of MOETAB sees La Solución as a direct result of the land rights battles fought between indigenous folks and foreign investors earlier in La Solución's history.

Another resident of La Solución spoke more explicitly about indigenous use of mangroves prior to the establishment of La Solución. He said:

“Many communities went to the shore of the mangroves. Most of them didn't damage it, but in the 80s and 90s a part of the population was dedicated to extract carbon, they could take 100, 200, 300, or 400 pounds of carbon in order to sell it or take it to different cities. This needs an important part of the mangroves were burned or cut. It had regulations; some people did it legally, others illegally.”

Creating charcoal from mangroves is a process that is not currently practiced, but was a central aspect of mangrove use prior to the rapid growth of tourism in Bocas. In this way, foreign investment and the tourism industry altered the way that mangrove lands were being used. The presentation of different economic options meant that burning mangroves to create charcoal was no longer the most profitable use of the land; instead its value came from its proximity to the tourism industry and crucial infrastructure. One government official noted:

“The commercial mangrove lasted until the tourism appeared here, we had another way to make money. Since then, mangroves haven't been damaged anymore. Carenaro, Bastimentos, Bocas, and San Cristobal were places where mangroves were always cut. Four communities cutting mangroves at the same time, it was a lot every 15 days.”

Here, we see a distinct separation between the period where mangroves were a source of income and the period when mangroves became a point of access to other sources of income by serving as a living space. We also see a distinction here between damaging mangroves to create charcoal, versus the damage that occurred to mangroves when urban mangrove neighborhoods, like La Solución, came into existence in Bocas. As the tourism industry necessitated the preservation of

the environment to maintain the destination-worthy beauty of Bocas del Toro, the environment became commodified in a completely different way. This continued association of the environment with capitalistic interests serves to distance people from an understanding the environment as something other than a resource to be exchanged or preserved for financial gain. The shift from burning mangroves to create charcoal to the tourism industry is just one example of the ways in which the neo-colonial metabolic rift has simply evolved and changed form over time as the interests of capitalism have changed alongside it.

Though the use value of mangroves has changed since the influx of tourism, residents still generally perceive mangroves as ecologically important and say that the mangrove spaces should be protected. Additionally, many residents consider mangroves to be part of the nature that they believed to be connected to themselves. Of the mangroves, one resident said, “It’s natural, nature. But, of course, the mangroves are like a nature like whichever. Because species, like us, have life but it’s a place where also we can live, but for this not more.” Here the resident considers the mangroves both to be a part of nature, but is practical about the use value of mangroves and seems to justify cutting down mangroves in areas where people need space to live. Mangroves as possible land space therefore are prioritized over their possible ecological or cultural importance. The resident later emphasized repeatedly that mangroves are protected: “It’s prohibited to cut them. Do you understand? It’s prohibited to cut the mangroves. The government takes them and they make them, like, protected, you understand? So in case we want to live and cut them and they don’t like that, but what can you do? Because we have to do this.” The resident clearly knows that mangroves are protected, and is emphatic about sharing this information, yet makes it clear that though it’s against the law to fell mangrove trees, for residents it doesn’t feel like there is another option. Here we see a tension between knowing the

law and the ecological importance of the habitat, but at the same time feeling as though this action is necessary for residents to have a place to live. The creation of La Solución again fits with Sen's description of the unintended city (Sen 2009). While residents understand that there are minimal legal avenues through which to pursue titles to the land, they are still drawn to La Solución because of the lack of availability of land nearby employment. When asked if the mangroves should be conserved, the resident responded, "Of course [...] because they are a part of nature." Only a municipal architect for the town directly acknowledged the impact of La Solución on the mangroves. He said, "If those houses weren't there, there'd be mangroves instead. There's dirt and it smells bad [...] They cut it down and filled it with houses. They've already done the damage." In this way, La Solución embodies the tensions between the environmental implications and the social implications of the growth of the tourism industry and the ways in which changing economies have changed land use and geographies in the area. Residents intending to benefit economically from the tourism industry have few options and generally must then utilize practices that are harmful to the environment. Essentially, residents are forced to co-opt the rhetoric of the neo-colonial metabolic rift and distance themselves from the environment in order to understand their creation of La Solución.

For other residents, their consideration of the importance of mangroves stems from an understanding of their ecological purpose. When asked what she thought of the mangroves, one resident responded, "Very important. The mangroves are very important. [...] Because there is where the fish nest. It is also like a protection for the fish. This is why they are important. Necessary." Another resident spoke about the importance of the mangroves for the birds, another spoke about mangroves as "giv[ing] us the air we breathe." The ways in which residents are thinking about mangroves currently isn't as related to their current environmental predicament as

it is related to the ecological importance of mangroves to other species. These conceptions of the mangroves seem to be more related to the ways in which nature is spoken about. Rather than considering the mangroves to be an ecological buffer from tropical storms or a buffer for preventing shoreline erosion, these residents' conceptions of the mangroves seem to be in tandem with discussions of nature and why it is valued. The reasons for the mangroves importance as relevant to fish, birds, and air not directly related to human consumption needs, instead they appear to be based in appreciations of nature, and values of a nature as everything, as an extension of the human body. As one resident put it, "I live from the Earth, and the Earth doesn't live without nature." Here we can see residents of La Solución connecting to nature through the mangroves, even though the presence of the neighborhood is harmful to the habitat. This way of conceptualizing nature in La Solución seems to be in tandem to the temporary nature of residents' tenure in the neighborhood. Living in La Solución appears to be a temporary solution to a lack of available economic resources, and a condition that many residents do not expect to live in for the rest of their lives. Many residents speak about leaving the neighborhood after their children are done with school or after they've made enough money. Other residents speak about restoring the neighborhood to a mangrove forest. Perhaps conceptualizing of their life in La Solución as temporary and currently necessary allows residents to transcend the logics of the neo-colonial metabolic rift and attempt to maintain their connection to the environment. The rhetoric residents use to describe their connection to the mangroves and nature more generally seems to embody the logics Pellow uses to speak about socioecological equality (Pellow 2014). Understanding the ways in which residents of La Solución connect to the environment and their neighborhood could therefore potentially be useful in thinking about resistance to the prevailing hegemony of the neo-colonial metabolic rift. The relationship

residents describe to the mangroves and their understandings of how they came to create La Solución demonstrate an innate understanding of the neo-colonial metabolic rift and the ways in which capitalism has systematically distanced them from the environment.

Resident Perceptions of Tourism

Most residents acknowledge tourism as one of the reasons that they have migrated to La Solución. They connect the growth of the tourism industry to their jobs in construction, hospitality, and as tour guides or boat drivers. Many residents are quick to acknowledge the benefits of tourism. One resident noted, “We see changes in the children, also. They are worried about the children [...] Those from here are surpassing, they are studying. They are working and the change is seen.” Here, the benefits of tourism are directly related to the opportunity for upward mobility. The municipal architect touches on something similar:

“A big amount of the population is benefitting. Although Asians just want to have Asian employees, other businesses want a lot of volunteers. Locals’ life would change if they looked for help with customer service. Economically, it’s gotten better. We don’t give the best attention sometimes. If we don’t give good attention the tourism will slow down. Money wasn’t enough before. My father lives on tourism and I could study thanks to that.”

Here we see the municipal architect drawing a connection between his education and the tourism industry. However, he also acknowledges the fact that residents are not benefitting from tourism to the degree to which they potentially could. He discusses explicitly the prejudice he sees in the Asian owners of grocery stores who he thinks only hire Asian employees. He also seems to acknowledge the trend of volun-tourism in which backpackers, students, and other tourists traveling on tighter budgets will work at restaurants or hostels in exchange for food or housing. This practice has been criticized because it allows hostels and restaurants to pull their workforce solely from those outside of the community, thus limiting the potential of the business to

economically benefit the location where it is geographically based.

Ultimately, the municipal architect and residents of La Solución seem to be pragmatic about what they expect from tourism. Many folks interviewed for this project explicitly linked foreign investment to destruction of mangrove spaces but also credit tourism with an influx of jobs and other economic opportunities. The municipal architect in particular highlights the ways in which tourism should be beneficial to the community, and where the industry and other foreign investors are siphoning money away from Bocas del Toro instead of economically benefitting the community. This is indicative of the ways in which the neo-colonial metabolic rift has not only commodified the environment in Bocas but commodified the people as well. The current structures of the tourism industry allow the community to benefit enough financially that they are supportive of the industry yet not enough to allow the community to operate without foreign investment and regain their connection to their local environment. The neo-colonial logics embedded in Bocas del Toro push forward the foreign investors as those benefitting the most from the industry, largely through the legislation that promotes tourism investment and does not prioritize regulating the industry so that the local community is benefitting significantly from the tourism industry.

Conclusions

Following the thread of the tourism industry throughout the history of Bocas del Toro and into La Solución is a complicated and complex task. The ways in which foreign investment has shaped the geographies of Bocas to meet their monetary needs also created space for the creation of La Solución. Initial clearings of mangroves in Bocas del Toro created space for the main streets of Bocas, now the epicenter of the tourism industry in the archipelago. Though the

process of creating space for La Solución through the clearing of mangroves was similar to the process of creating the main streets of Bocas, because of who is taking the action and at what point in history it is happening, the processes become fundamentally different. Thus, perceptions of land use and availability of land in Bocas are directly related to the identity of the land consumer. La Solución follows in the footsteps of the precedent set by the United Fruit Company, but the action is in turn villainized and prevented from becoming filled in land, like the main streets of Bocas. Through the microcosm of La Solución we see the ways in which foreign investment has altered the geographies of Bocas and co-opted land use practices. We also see the ways in which tourism has drawn people to Bocas, and created the need for a temporary housing solution. La Solución is therefore the manifestation of the neo-colonial metabolic rift in Bocas del Toro. It demonstrates the ways in which people are unable to keep a relationship to the environment that exists outside the logics of capitalism without sacrificing their survival. La Solución illustrates the ways in which people in Bocas must participate in the commodification of nature in order to survive financially. Although residents have an innate understanding of socioecological equality, they are unable to put this into praxis because they are trapped in the neo-colonial metabolic rift (Pellow 2014).

The residents of La Solución also highlight a staunch difference between the ways that mangrove habitats are valued and utilized in the area. They speak about the role of mangroves in terms of the human body as an extension of the nature around them. The mangroves are connected to the residents of La Solución beyond simply their use for holding space. Ultimately, we can think of La Solución as an unintended city of Bocas, created due to the prominence of the tourism industry. The forces that lead to an unintended city can be identified as, “formal economic, planning, and governance structures and systems used them and their labor but had no

real place for them,” (Sen 2007: 17). Existing alongside the infrastructure of the tourism industry, the airport, La Solución represents a space existing parallel to the tourism epicenter of Bocas, but directly related to the functioning of the tourism industry. Land use thus separates La Solución from the main streets of Bocas by deeming one area fit to be filled and inhabited by tourists and the other fit to be inhabited by Panamanians. Land use thus creates a hierarchy of space in which changing the geographies of the island can only be possible and made necessary by foreigners. La Solución represents the intersections of the economic, environmental, and social structures in Bocas del Toro. Economically, this space is the only available area where residents can afford to live and be close to necessary infrastructure, like schools and the hospital. Environmentally, the mangrove habitat as endangered and protected makes it both feasible for residents to live here but also puts the residents at the mercy of relocation programs from the local government and the Ministry of Housing. Socially, the migration into La Solución is a reflection of the lack of available economic opportunities for indigenous communities. Though there is more work in Bocas del Toro than on the mainland, the work is still not permanent and lacks opportunities for social mobility. Though La Solución is conceptualized as a temporary housing solution for many of its residents, these three factors compounded make the neighborhood more permanent. Although the of La Solución are trapped within their unintended city and the commodification of the environment, their conceptualizations of their relationships to nature through a lens of socioecological equality may be a path towards resistance against the neo-colonial metabolic rift.

Chapter 3: Interactions of the Tourism Industry

This chapter will aim to explore themes of migration and tourism in Bocas del Toro, particularly in the neighborhood of La Solución to understand the ways in which tourism impacts the Bocas del Toro area. Interviews from tourists and those working in the tourism industry will help to interrogate the connection between tourism and migration into La Solución, through the lens of land availability and changing economic situations. Through the lens of La Solución and Bocas del Toro, this chapter will explore debates over whether or not tourism is a useful tool to pull communities out of poverty and the degrees to which it economically benefits the host community. Perspectives of tourists and those working in the tourism industry concerning the environmental concerns in Bocas del Toro will be presented in conjunction with research surrounding the impacts of climate change in the region to better understand the connections between the tourism industry in Bocas, La Solución, and environmental resources in the area. Understanding perceptions of the tourism industry and how tourists are thinking about La Solución in Bocas is important for understanding the manifestations of the neo-colonial metabolic rift in La Solución.

Changing Tourism

Tourism has had a role in the economic growth and geographical changes occurring in Bocas del Toro since the opening of the Gran Bahia Hotel in 1968. Since then, a relationship with Costa Rica that encourages tourism to Bocas as well and Bocas' growing prominence as a surf destination have led tourism to gain a deeper foothold in the economic affairs of the community and ultimately become one of the main sources of income for the community. As tourism has become a dominant economic force in many communities and countries in Latin

America, scholars have attempted to understand the impacts of tourism in these places and whether or not encouraging tourism to the area is actually beneficial financially, socially, and environmentally. In Bocas, this question must also consider the welfare of urban mangrove spaces like La Solución and their residents.

Residents in Bocas seem to appreciate the presence of tourism in their community for a number of reasons. While some spoke of tourism in largely financial terms, others enjoy the opportunity to get to know tourists from different places and engage with tourists as a cultural experience. One resident of La Solución said, “I came because there is a lot of tourism and that’s what we came to do and make money.” This resident seems to associate tourism directly with an influx of money and jobs. To this resident, tourism is opportunity and a reason to leave home. These economic benefits are often prioritized without any thought to economic or cultural consequences. In “On Tourism and the Construction of ‘Paradise Islands,’” Carla Guerrón Montero writes, “With tourism as a key focus, ethnic diversity has been celebrated to attract tourists, by portraying the country as an ideal ecotourism destination, but also as a place of racial and ethnic diversity,” (2011, 26). Through Guerrón Montero’s work surrounding the experiences of Afro Caribbean people in Panamá we can see the ways in which certain constructions of Panamanian culture were brought forward as reasons for tourists to come to Panama while legacies of slavery and colonialism are largely hidden and ignored. The country posits itself as a racial democracy, ignoring the systemic oppression of indigenous groups in the country, seen through widespread poverty and the creation of the comarcas. This legacy of racial inequality can be seen in the population of La Solución, a community largely made up of indigenous folks who have migrated from more rural areas, often the Ngäbe comarca.

A municipal architect in Bocas town spoke about both the negative and positive impacts

of tourism. He spoke about the ability of locals to hold jobs in the hospitality industry and the degrees to which tourism is able to economically benefit the community:

Too many people wait for tourists to take advantage from them, rob them, sell drugs, and many young guys don't want to work. But tourism brings investment and jobs for locals, who are not ready to receive tourists. A big amount of the population benefits. Although Asians just want to have Asian employees, other businesses a lot of volunteers. Locals' life would change if they looked for help with customer service. Economically, it's gotten better. We don't give the best attention sometimes. If we don't give good attention the tourism will slow down. Money wasn't enough before. My father lives on tourism and I could study thanks to that.

As Municipal Architect of the town of Bocas del Toro, he oversees much of the construction happening in the area and is in charge of regulating whether or not new construction meets the cultural requirements for any new building. Because he is made aware of all new construction, the municipal architect also has a good understanding of who is building in Bocas del Toro and who they're hiring. The architect seems to attribute the economic benefits of tourism as available only to those who are able to work in the hospitality industry. He seems to be concerned that Bocatoreños are not properly prepared to work in the hospitality industry, perhaps insinuating this should be a bigger focus of education in Bocas as the tourism industry grows. He also acknowledges the divisions among the residents of Bocas, and the differences between the access to tourism they have and the degrees to which they are able to benefit financially from the tourism industry. There is a common understanding, expressed by the municipal architect, and other Bocas residents interviewed for this project that tourism brings jobs for locals. The jobs brought for locals seem to be often indirectly related to the tourism industry. Rather than existing as jobs directly within the restaurants or hotels, the jobs residents of La Solución describe having are usually in the construction industry, building the sites for future hotels. Thus, their ability to benefit off a growing tourism industry requires continual growth of buildings, and an abundance

of space where these buildings can be constructed.

The tourism industry has also led to the growth of various transportation industries, like boats, taxis, and shuttles to beaches. Oftentimes these industries are collectives, where a group of drivers establish a certain route or obtain a dock they all share. These are the tourism businesses that seem to be largely run by Bocatoreños and seem to have sprung up in a grassroots-like manner. One organizer of a shuttle bus collective spoke about his view of the tourism industry:

Organizer: Well, tourism for me is very good because it's a monetary method that makes it easier for us. Right? The money, there is more money. But the tourism sometimes is like... there are many who don't respect the island, many who go to the beach leave their trash.

Interviewer: Tourists?

Organizer: Foreigners, tourists who are then going around impertinent. Because there are tourists who when they drink have no control, are very crazy and sometimes someone advises them, "Do not do this because it is wrong" and they get angry with you. And on top of that one sometimes even stays in the police station for trying to correct them. There are very crazy tourists and there are also tourists who are lovely people who come to take care of, they pick up the garbage. That is, it has its pros and cons; there are good tourists and there are also bad tourists.

The perspective shared by this organizer demonstrates the degree to which the tourism industry encourages the perspective of the neo-colonial metabolic rift in its interactions with the community. By reinforcing the idea that residents of Bocas should not encourage tourists to be more environmentally-friendly in their behavior, the tourism industry reinforces the idea that the monetary benefits of the tourism industry should outweigh the possible environmental consequences. In this way, the tourism industry encourages the residents to distance themselves from the environment and instead align with the tourism industry's commodification of the environment. The experiences of both residents and employees in the tourism industry highlight

the potential for a positively impactful tourism industry, yet also demonstrate the ways in which the current location of the tourism industry within the neo-colonial metabolic rift prevents these outcomes.

Regulation of the Tourism Industry

There are laws in Bocas that aim to connect locals with jobs in the tourism industry by requiring that a certain percentage of the employees at a given business be Panamanians. In the past this law has been unregulated, allowing businesses to hire mainly volun-tourists, backpackers willing to work at the hotel or hostel in exchange for a place to sleep while they are staying in Bocas. In November and December of 2017, law officials conducted raids of businesses, checking to make sure they had the proper licensing but also looking into the employees of the establishment. These checks prompted many restaurants and hotels to employ more Panamanians. Hostels that previously worked primarily by hiring volun-tourists and had minimal engagement with the local community began to employ Panamanians, and more specifically Bocatoreños. This is something the municipal architect alludes to as a problem with tourism when he says, “other businesses hire a lot of volunteers.” An official of the Tourism Authority of Bocas del Toro noted, “They don’t want to hire Panamanians because they have to pay them more because they have the proper papers.” Of the total population of Bocas, approximately 7,900 people, about 3,200 people are employees in the tourism industry (Tourism Authority interview, 2017). These increases in the numbers of people employed by the tourism industry in Bocas demonstrate the possibility of financial benefits to the local community, provided the tourism industry is properly regulated.

The Tourism Authority in Bocas has also documented growing changes in the tourism

industry. In 2017, the Tourism Authority reported 135 hotels in the area. Of those 135 hotels, only 52 of them are legally registered. Although the tourism industry has included the unregistered hotels in their count to keep their documentation of the tourism industry more accurate, the illegal hotels are difficult to regulate and leave the Tourism Authority without a full picture of how the hospitality industry is affecting Bocas. This trend of unregistered hotels and hostels, the Tourism Authority says, is indicative of the lack of overall regulation occurring at the local and federal government levels. A representative of the Tourism Authority stated, “There’s no interest of the local or national government to regulate tourism the way it should be regulated. But we always have done it this way. It hasn’t been regulated for so long.” This raises the question how can the tourism industry be as beneficial as possible to local populations if much of the industry escapes the regulations and laws put in place to benefit the local community simply by not being legally registered businesses?

The Tourism Authority argues that the community is benefitting, specifically in terms of jobs and income. The representative said, “[If someone is not working it] is because they don’t want to work.” He spoke specifically about the number of jobs that become available when a new hotel or hostel is opened, attributing approximately twenty jobs to each hotel. “There are always more jobs available because new places are always opening,” he said. The Tourism Authority does not seem to have one prevailing idea about whether or not tourism is benefitting the locals of Bocas del Toro. For every seemingly positive attribute of tourism, the representative had a negative aspect as well. He spoke about competition for jobs coming from tourists coming from Venezuela and Colombia, about how tourists are not supposed to be able to work in Bocas yet they are still holding jobs, and the dependency of Panamanian tourism on the continued success of Costa Rican tourism. The number of variables that need to be regulated in order to

have a tourism industry that is beneficial in significant and consistent ways for local populations indicates the degree to which the tourism industry is stuck in the logics of the neo-colonial metabolic rift. The intense commodification of the environment and people of Bocas del Toro illustrate how the tourism industry is dependent on the logics of the neo-colonial metabolic rift to be profitable.

Tourism and the Environment

Nearly everyone interviewed for this project expressed some level of concern for the environment, but their opinions varied concerning whether or not the environment is being put at greater risk as the tourism industry grows in Bocas. The Tourism Authority representative argued that while currently the environment is not in a position to last long in Bocas, trash and waste are the area's biggest environmental issues. "Find a place for the trash to go and then the environment will be in a good place," he said. The prominence of trash in the streets of Bocas was a recurring theme in conversations with tourists and business owners. A tourist from Germany tied the visibility of trash in Bocas to tourism, believing that having so much trash in the streets is "bad for tourism." One tourist from Australia believes, "The environment here is pretty poorly treated. That's another thing. The people from [Panama] City look after the beaches and cleanup and what not. But more like indigenous culture and whatnot probably tend to like litter and don't like really give a shit about what happens." This perceived relationship between the environment and tourism seems to assert responsibility for the environment to local communities but the reasoning for environmental concern is designated externally to tourists. In these perceptions, the commodification of the environment is perpetuated as tourists are thinking of the environment in terms of their own experience as tourists and as a product necessary for the

tourism industry. In other words, locals should be concerned about how tourists are perceiving the environment in Bocas because the environment is valued solely as a part of the tourism industry. Through tourists' descriptions of the environment in Bocas we can see how deeply the logics of the neo-colonial metabolic rift are embedded into the rhetoric of the tourism industry.

A tourist couple from Portland, Oregon who heard about Bocas while staying in Costa Rica had a slightly different perspective. They had noticed an informal trash dump next to their hostel and were interested in the available infrastructure for waste management. They noted that they wouldn't be surprised if, "there was animosity towards tourists because of the trash they bring." Their perceptions of waste management in Bocas indicate their awareness of the by-products of the tourism industry, such as increased levels of trash, and their concern that while locals are excited about the tourism industry, their presence as tourists might be environmentally harmful. This is in line with the ecological bubble described by Pattullo (1996) where the lifestyle demands of tourists can create a waste stream and demand for resources that is incompatible and extend the limits of the island. The couple spoke about ecotourism as a solution to this, but also expressed concerns that some ecotourism is just labeling. They want their money to go towards sustaining the environment, noting a difference between the local economy and the local preservation economy. Here, we see tourists as being concerned about the environment, but rather than being concerned about how locals are treating the environment, they are more worried about whether or not the area has the infrastructure to support the tourism industry and their personal environmental impact. This perspective seems to be more in line with an understanding of socioecological inequality than the metabolic rift as it appears to be concerned with the environment as more than just a commodity. Encouraging tourist perspectives that are closer to socioecological inequality than the neo-colonial metabolic rift is an important mode of

resistance to the rift that pushes folks to think beyond the commodification of the environment.

As a result of the increased economy the tourism industry brings to Bocas some of the infrastructure in Bocas is in the process of being updated. Sharon, the co-owner of a bed and breakfast in Bocas, told me about the hospital the local government is building down the road from her property and how the town is updating the waste processing infrastructure as well.

The hospital, that's good. That's good news and hopefully they'll get some good people to work there and that will be an improvement. I'm curious what they're going to do with the old hospital. I have no idea. They're putting in a bigger sewer system, sewage treatment, and they're hopefully going to have everybody from the hospital into town will be invited to hook up to the sewer, because everybody's on a septic tank that may or may not work well. So hopefully everybody, including the Playa Tortuga Hotel will be hooked into a sewage system that goes over there and hopefully treats it correctly before shooting it out into the water. You know, there's a lot of "we'll see what happens."

Although Sharon is excited about the new infrastructure and the potential it has for improving the standard of living in Bocas, she is also apprehensive about whether or not the infrastructure will ultimately be built. By December of 2017 when Sharon and I spoke construction had already started at the new hospital site, but Sharon was wary of the long history of politicians in Bocas disappearing money at the end of their political terms. A new sewage system in Bocas would be a huge improvement for many, but is not necessarily an infrastructural upgrade that will help the residents of La Solución, especially in the neighborhood's current location. It is unclear, based on Sharon's description, if the new location of La Solución would have access to the new sewer system. However, the new location of the hospital and the land purchased for the relocation of La Solución are relatively close, and are indicative of geographical shifts in where new construction is taking place in Bocas. This shift in Bocas is something that deeply concerns Sharon, and even prompted her to think about the possibility of selling her bed and breakfast.

I'm upset about it because it's bad enough the diesel trucks come by here and go up to fill the generator with diesel. It used to be once a week and now it's... I don't know, I don't sit up here all long to say, but it's at least several times a week now that I see these big gigantic trucks go by. [...] And then they're building the hospital down the road so all the trucks are going back and forth with supplies and cement mixers and everything for the hospital. So that's made a big impact. If they suddenly are going to build 400 homes up the Y, up the Drago road, our peaceful spot right here is going to be impacted more and more, so that troubles me.

While Sharon appreciates to some degree the new infrastructure in Bocas, her response is reminiscent of a "Not In My Back Yard" approach (Pellow 2007:126). Sharon is participating in the increased need for generator fuel as she runs a tourism business that brings more folks to the island yet she does not want to witness or be affected by the impacts of that action. Similarly, she expresses support for the relocation of La Solución and the construction of the new hospital, but wants neither of these locations near enough to her home that they negatively impact her. While not a direct example of the NIMBY approach, these perspectives do emphasize a trend where tourists or business owners acknowledge an action as harmful yet do not want it to cease, but rather to simply be invisible to them. She is content with improvements to the infrastructure and their possibilities for better protecting the environment, specifically marine life, from further harm as the amount of waste in Bocas grows. However, she wishes that the construction of new infrastructure did not impact her "peaceful spot" and wishes that the growth of the town, the new hospital, and the relocation of La Solución were not happening near her. This is not to say that Sharon is not deeply considered with the environment in Bocas. She spoke extensively about her concerns about the significant use of plastic on the island and her concerns about pollution. This is reflective of the ways in which tourists, business owners, and expatriates attempt to preserve their own ideals of Bocas, and other constructed "paradises" and see changes in infrastructure and new construction as contrary to their preservation efforts. Many tourists and business owners further the commodification of the environment and the logics of the neo-colonial metabolic rift.

Conclusions

These infrastructure changes and improvements also demonstrate positive changes for the environment that are possible because of government funding, likely bolstered by taxes derived from the tourism industry, directly or indirectly. While these changes can be ultimately positive because they allow Bocas to more sustainably support a growing population and a growing tourism industry, it's also important to note the implications of the center of town spreading further outwards. Less and less space available in the center of town means that the center is becoming increasingly occupied by the tourism industry, leaving less space for the infrastructure needed by local residents and spaces for residents themselves to live in. This also raises questions of an ecological bubble as the demands on the ecological resources become greater with the growth of the tourism industry and increasing numbers of annual visitors. The notion of an ecological bubble goes hand in hand with the neo-colonial metabolic rift, riding on the assumption that the environment exists solely to be commodified and utilized as a resource.

The perspectives of tourists and business owners in Bocas del Toro makes clear the degree to which the tourism industry is embedded within the logics of the neo-colonial metabolic rift. As tourists place the responsibility for the environment on the shoulders of local residents while simultaneously failing to understand the impact of their travelling and the ways in which neo-colonial structures have left countries in the Global South without adequate infrastructure to be more environmentally sustainable. Moreover, the rhetoric used by tourists to describe their experience perpetuates and reinforces the environment as a commodity. Tourists and business owners both seem to locate the environment solely in relation to their own uses for it, rather than thinking about nature from a perspective of socioecological inequality. This serves to further distance people from the environment, reinforcing the logics of the neo-colonial metabolic rift.

Understanding the ways in which the tourism industry operates under the metabolic rift in Bocas is crucial for thinking through the possibilities for regulating and reforming the tourism industry to embrace socioecological equality. Thinking about the tourism industry in tandem with the creation of La Solución could also be instrumental in community organizing and activism for residents of La Solución. By connecting the tourism industry to La Solución and conceptualizing of the neighborhood as a manifestation of the neo-colonial metabolic rift, residents can think differently about how to regulate the tourism industry based on their own experiences at the intersection of environmental concerns and the tourism industry.

Chapter 4: Conclusions

Writing a conclusion to an ongoing story and an ongoing problem is challenging. As I write this, the process of relocating the neighborhood of La Solución is slowly getting underway. Changes are likely still being made to the policies that will govern the relocation of La Solución, new buildings are being constructed along the main street of Bocas, construction on the new hospital is underway, ecological habitats are being affected, and the relationship between the tourism industry and the environment in Bocas will continue to evolve. Moreover, residents of La Solución and the residents of Bocas del Toro are beginning to learn of the relocation mostly via word of mouth. This is all to say that any conclusion I write will be insufficient and could not possibly sum up the entirety of this unfolding story. However, over the course of this project, I learned a lot by listening and asking what folks need, and based on those conversations with residents of La Solución that is the biggest suggestion I have for policymakers in Bocas del Toro and the Housing Authority of Panama. The local government needs to listen and implement changes based on the advice of the community members living in La Solución. What follows below are the changes I would recommend residents of La Solución push for from policymakers. Centering the lived experiences of folks in La Solución as they navigate these intersections are important for implementing the changes residents want to see.

The Relocation of La Solución

The relocation project is one that residents have differing opinions about, and while some feel positively about the potential for better living conditions, many of the residents I spoke to vehemently wanted to stay in the current location of La Solución. One resident argued, “We want to stay if they do not kick us out... We want to live here. We want landfill.” Another

agreed, “There is work, the school is close by. If there is work every day there is money. It is difficult living on the farm where I am. I have to sacrifice. We have buchu (small bananas), sometimes we have to buy them. It is difficult. The high school is far away.” For these residents, the geographical location of La Solución is something crucially important to their desire to stay in the neighborhood. While these women understand that the neighborhood is at the mercy of the government, they also have an intimate understanding of the forces that drew them and other families to La Solución. These perspectives make abundantly clear the need for resident input in the relocation of the neighborhood, especially because residents of La Solución were given no say in whether or not the neighborhood be relocated in the first place. Listening to the experiences and perspectives of just a few residents can make abundantly clear what needs the new neighborhood location simply cannot meet.

Primarily, there needs to be a drastic reconsideration concerning the relocation of La Solución and the policies that will govern the setup of the new neighborhood. The regulations that determine factors like rent and how many people can live in a house will cause significant changes in the lives of residents of La Solución. Determining how big a household will be in the new neighborhood location may break up existing households in the current La Solución, therefore changing the income of that household. Denoting what defines a household not only combats alternative notions of family that extend beyond the stereotypical Western conception of the nuclear unit, it also breaks up a pre-existing household income. By splitting apart households that have been operating together, the income of that household will also be redirected into two different mortgages. This practice at least doubles the bills a given household has without making any increases to the income of the household. The mortgage on the new houses is expected to be between fifty and seventy dollars per month, which would constitute a huge

percentage of a household's monthly income. Instead of creating new financial hardships for a population already living near or below the poverty line, households should be able to remain in whichever formulations they choose and the mortgages arbitrarily set by the government should be within the budgets of those who the neighborhood is supposed to support. By changing the location of the neighborhood, government officials have also increased the amount that households will need to pay for transportation. The current location of the neighborhood is within walking distance to crucial infrastructure like the school, the hospital, grocery stores, and job sites. As one resident noted:

The Ngäbe people are here for the need to work and to have a better tomorrow and partly so that their kids can go to school. That's why we're here, out of the need to work. While the government keeps me in this job, I'll be here. While I have a job, I'll be here. If they decide to get rid of me, in this job, then I'll return to San Cristobal [another island in the archipelago].

The new location of the neighborhood puts all these destinations at least a dollar taxi ride's distance away, bringing back transportation costs folks moved to La Solución to avoid. The cost of living in La Solución will likely increase with the relocation. Without consulting residents about the relocation, it will be impossible for the Housing Authority to understand these needs and address the reasons that La Solución came into being. The Housing Authority should be more vigilant in communicating with residents of La Solución about the conditions of the new neighborhood and how the municipal government can best mitigate changes like increased spending on transportation. One way the municipal government could recognize and support residents of La Solución would be to implement a government-run school bus system so that parents are not responsible for paying for their children to get to school every day. This could help to limit the increased day to day costs of the new neighborhood location.

The Housing Authority of Panama also decided that all the houses in the new

neighborhood will be under the men's names. This structure perpetuates patriarchal family structures that systematically limit women's agency and power. This policy limits any legal right a woman may have to the house and completely disregards the financial contributions and labor that women provide to their households. It is unclear if this policy makes it more difficult or impossible for women to get a house in the new neighborhood without having a male partner. Houses should be able to be mortgaged under the names of multiple members of the households, and moreover women should be able to mortgage a house as the head of the household. Again, this would drastically limit the options for some of the women living in La Solución. The houses in the new location are also supposed to be reserved for folks whose house in La Solución is their only house. However, many folks living in La Solución have houses on other islands or the mainland, but have chosen to also construct a house in La Solución because of its proximity to jobs and infrastructure. By limiting the new neighborhood to folks with only one house, many residents of La Solución will become without a place to live on Isla Colón. The land availability of the island and the increasing rents and mortgages coupled with the loss of La Solución could leave folks with no other place to live on the island. Instead of thinking about ways to support folks who have migrated to Isla Colón in search of jobs or to avoid spending the majority of their income on transportation, the Housing Authority will be taking away a structure that provided a way for folks to exist and benefit from an island and an industry that is becoming increasingly exclusive.

It is also unclear what will happen to the small stores and community center that exist within the neighborhood. Several residents of La Solución own small shops within the neighborhood where they sell a variety of products ranging from laundry detergent to soda. The community also has a community pavilion that was built over the course of several months by

community members with funds they raised themselves. It is unclear whether the structure of the new neighborhood location will have space for buildings that are not residential or if the neighborhood will have any sort of central location that allows the community to gather. The selection of these policies to govern the setup of the new neighborhood demonstrates a fundamental disregard for the reasons why folks have moved to La Solución in the first place. In order to combat the systemic inequalities these new policies will bring to the neighborhood, the community of La Solución first needs to become aware of these issues and the ways in which they will negatively impact the neighborhood and individual families. Residents should then organize to form coalitions and demand representation in the relocation process. This can be done by lobbying the Housing Authority and the local municipal government while simultaneously garnering support from the larger Bocas community. By organizing into a community group that is interested in protecting the interests of the neighborhood and its residents, the community can demand participation in the process of relocation, allowing them the opportunity to impact the outcomes of the relocation process.

Nevertheless, this responsibility should not be on the residents of La Solución. The Housing Authority is responsible for consulting the residents of La Solución about how their needs can best be met in the new neighborhood location and working with community representatives throughout the forced relocation process. Residents should be meeting with Housing Authority currently to discuss the shortcomings of the government in supporting the neighborhood and pushing for different treatment in the future. These changes could come about fairly easily as the neighborhood is still being constructed and there is plenty of time before these policies have to go into effect. The construction of a new neighborhood is not an inherently negative change for the residents of La Solución. This is clear in the mixed reactions that

residents have to the relocation where some residents are excited about the possibility of relocation and others adamantly want to stay. Constructing the neighborhood is a positive step for both the environment and the residents in theory but when done without regard for the needs of the residents and without any understanding of the reasons for their migration into La Solución in the first place, the new neighborhood and its policies have the potential to exacerbate existing inequalities and further impoverish the residents of the neighborhood.

Changes for the Tourism Industry

Currently there are no structures in place that provide opportunities for residents of Bocas and La Solución to become business owners and government agencies are not strictly regulating whether or not businesses are hiring the mandatory percentage of Panamanians. The lack of regulation of the tourism industry businesses coupled with the incentives for foreign investment and ownership of businesses leaves the tourism industry in Bocas largely dominated by foreign investors with less money finding its way into the pockets of Panamanians, especially Bocatoreños. The tourism industry in Bocas del Toro needs to be incentivized to hire Bocatoreños into positions with the potential for upward mobility rather than incentivized to hire volun-tourists. However, hiring Panamanians is not enough; hiring Bocatoreños more directly helps the financial rewards of the tourism industry to find their way back into the local community. The regulation of the tourism industry also needs to be more directly connected to the preservation of the environment but this protection of habitats and ecological systems cannot simply restrict use of areas. Instead it needs to acknowledge the historicity of the land and its connections to capitalism. Environmental regulation of the Bocas area needs to acknowledge the power inherent in our interactions with the environment and the ways in which changes in land

use have been tied to the wants and whims of colonial and neo-colonial powers. Moving residents out of La Solución under the guise of repopulating the mangrove forest of the area, for example, only serves to widen the neo-colonial metabolic rift and does not acknowledge the environmental implications of tourism but instead further marginalizes the residents of La Solución while continuing to allow the development of large resorts in nearby habitats. In this way, the residents of La Solución are held accountable for environmental degradation when large hostels and hotels are destroying mangrove forests in the name of financial gain with no consequences. There needs to be greater oversight during the construction process to make sure that new businesses are complying with environmental regulations and not allowing building in endangered habitats.

Although most residents in Bocas are aware of the ecological importance of habitats like mangrove forests, environmental education that centers an understanding of socioecological inequality is needed so that residents understand the intricacies of their relationship to the environment in the context of both the tourism industry and growing environmental threats like climate change. Highlighting the ways in which humans benefit directly and indirectly from habitats like mangrove forests and the innate connection between people and the environment could help to establish norms of sustainability and lead community activists to push for more sustainable action in Bocas del Toro. Additionally, large companies that have big environmental impacts need to be held financially and socially responsible for their impacts in ways that then directly benefit the environment and people of Bocas. One way to do this might be through a tax on all large tourism businesses that goes toward the establishment of crucial infrastructure, like a recycling plant or a better waste treatment system, that would not only mitigate some of the environmental impacts but would also directly benefit the community of Bocas. In order for

these proposals to make real change concerning the environment in Bocas, community members need to raise awareness of the ways in which people have been systematically distanced from the environment in order to allow the success of the tourism industry. These proposals would help to firmly establish the accountability of the tourism industry to the environment and work to actively establish a relationship between the tourism industry and the environment that is reciprocal in nature. A different perspective on the relationship between the environment and people is especially important in a location like Bocas where the effects of climate change will drastically change the geography of the islands and thus the way of life. The current practices of the tourism industry and of the local municipal government need to work to acknowledge the ways in which relationships to the environment have been governed under capitalistic tendencies and disassemble this relationship in order to address environmental concerns in a socially responsible manner.

Looking Forward

These suggestions are by no means comprehensive and only address a very specific concern related to the nexus of the tourism industry, the environment, and the people of Bocas. However, these policy changes would aim to connect the environment and the people of Bocas outside of the tourism industry, while simultaneously holding the tourism industry accountable to the environment and the people in a way that creates productive and sustainable changes. Moreover, the suggested policy changes concerning the relocation of La Solución aim to center the voices and experiences of the residents of La Solución and their needs as the Housing Authority of Panama moves forward with setting the policies for the new location. These proposed changes to the new neighborhood take into account the historicity of the land in Bocas

and also understand the systems that led to the creation of La Solución in the first place. Without addressing the manifestation of the neo-colonial metabolic rift in Bocas, it will be impossible to make policy changes that can address the needs of residents of La Solución, regulate the tourism industry to the benefit of Bocatoreños, and protect the environment from the destructive tendencies of capitalism.

La Solución, and Bocas more generally, can be looked at as case studies to better understand the impacts of tourism in small communities located near or in endangered ecological habitats. As global institutions like World Bank and the International Monetary Fund continue to push tourism as a solution for poverty in countries in the Global South, structures of inequality and environmental racism like those that plague Bocas need to be interrogated, understood, and dismantled. If the tourism industry continues to operate globally, it needs to be done in a way that is not reliant on the structures and systems of the neo-colonial metabolic rift, but instead directly benefits and is driven by the host community. This means that reform and changes to the regulation of the tourism industry also need to be driven by grassroots organizations based in the host communities. This work is by no means done, especially in Bocas, and requires a larger shift in how we think about the goals of the tourism industry and our relationship to the environment. Residents of the neighborhood should organize and begin advocacy for better policies governing the relocation of La Solución. Environmental protection in the region needs to be more strictly regulated, with policies centering endangered habitats and the needs of local communities. Regulation of the tourism industry needs to be focused through the lens of the socioecological inequality and Bocatoreños to ensure that both the local community and environment are benefactors of the industry (Pellow 2014). This work hinges on the interrogation of the neo-colonial metabolic rift and the structures through which relations between humans and

the environment are commodified. Hopefully interrogating the neo-colonial metabolic rift and imagining a socioecologically equal future in La Solución and Bocas del Toro can serve as frameworks for interrogating the implications of the rift for the tourism industry more broadly.

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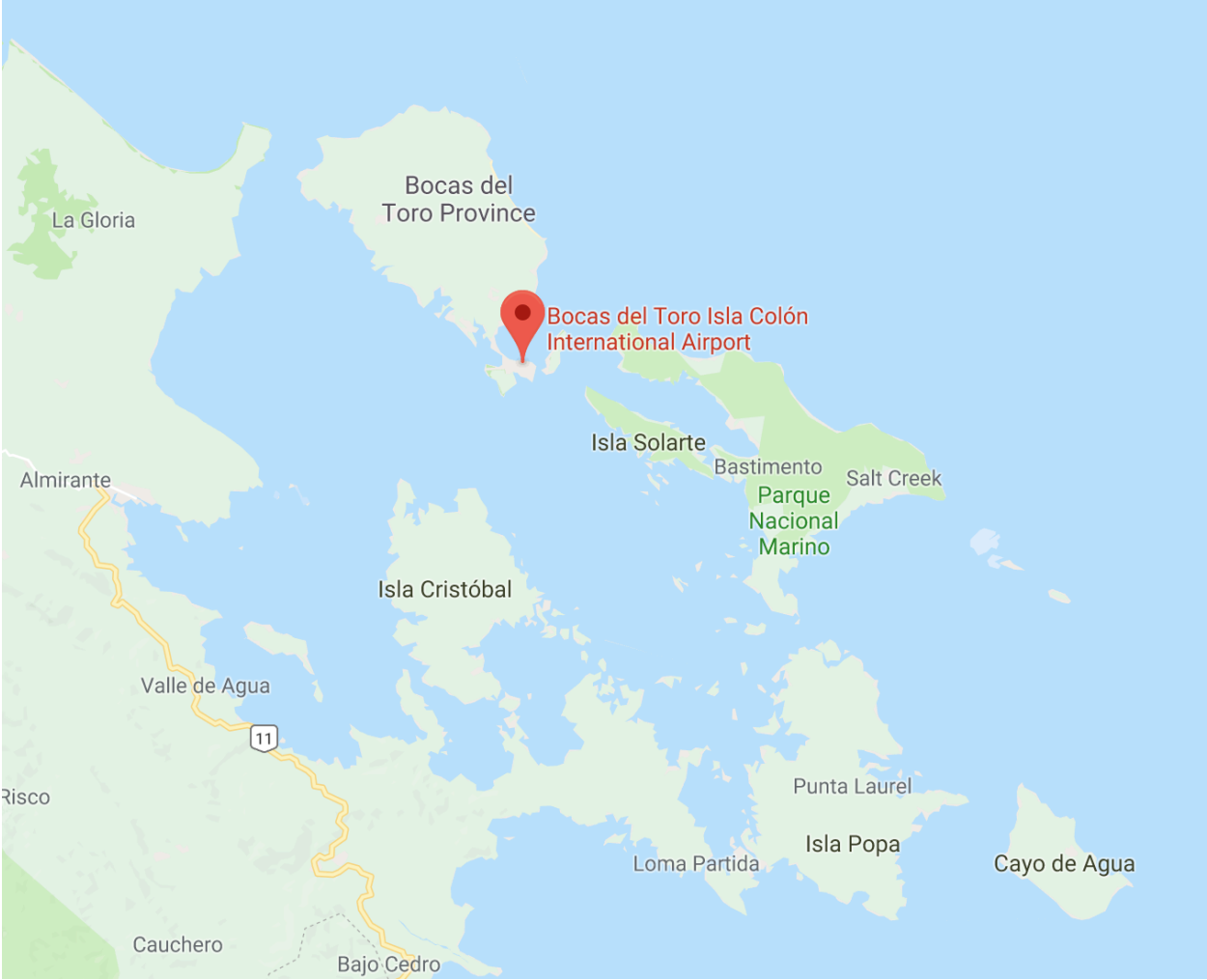
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Appendix A. Maps

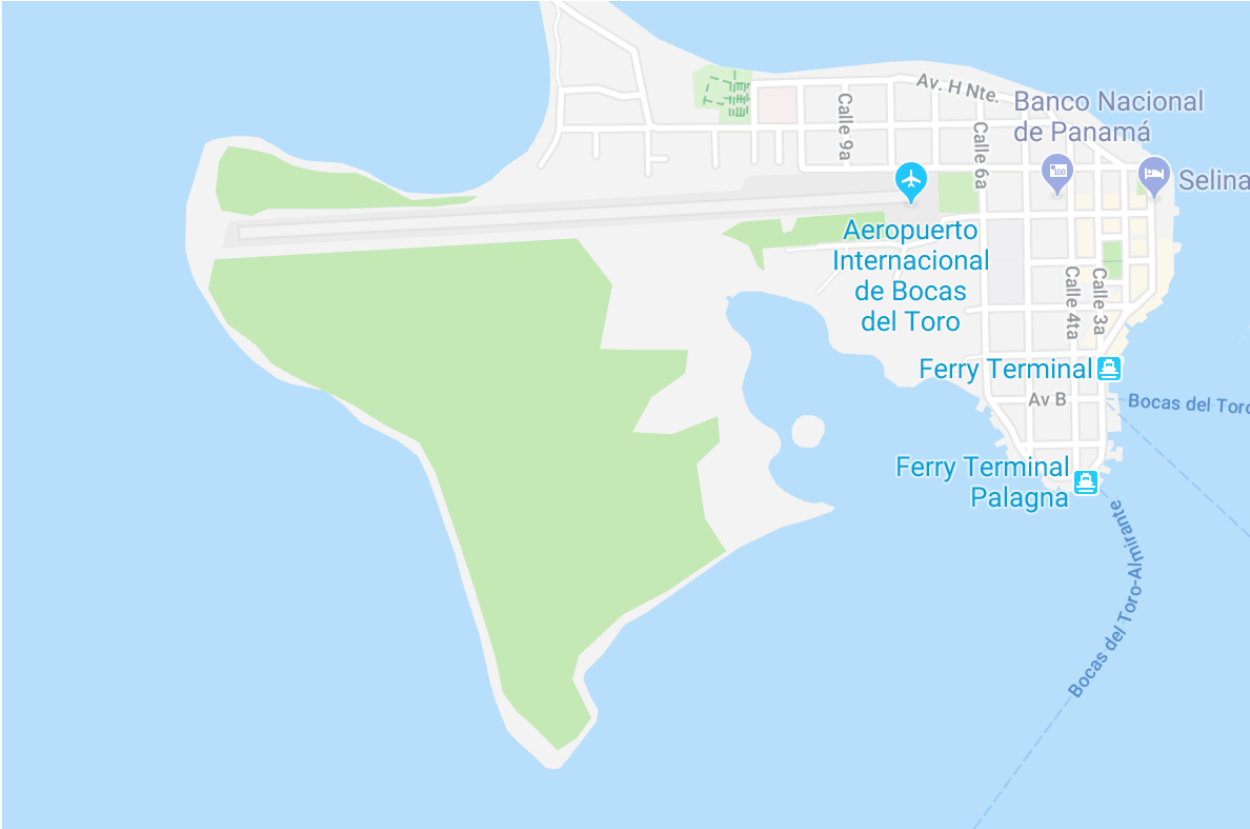
Map 1: Map of the Republic of Panama with approximate location of La Solución marked (via Google Maps).



Map 2: Map of the Bocas del Toro Archipelago with approximate location of La Solución marked (via Google Maps).



Map 3: Map of Bocas del Toro town on Isla Colón (via Google Maps).



Appendix B. Photographs

Photo 1: Satellite image of La Solución taken in 2004 (via Google Earth).

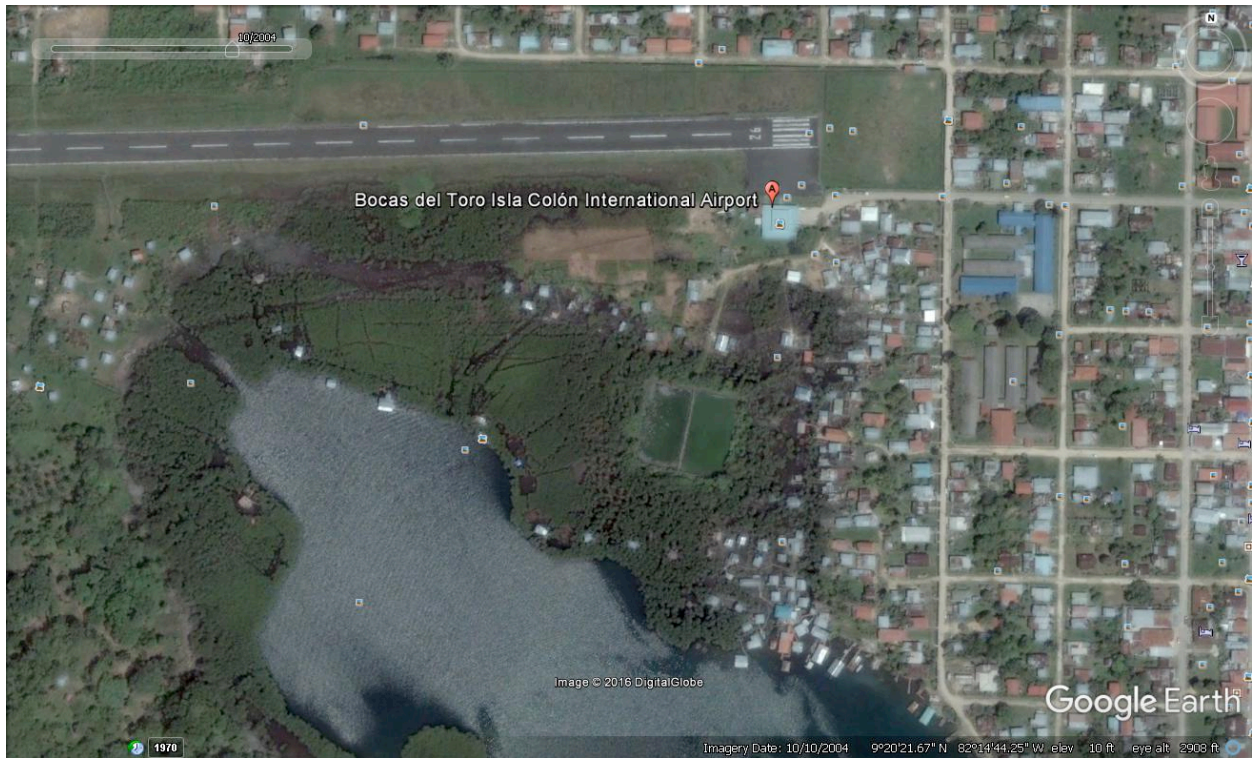


Photo 2: Satellite image of La Solución taken in 2011 (via Google Earth).

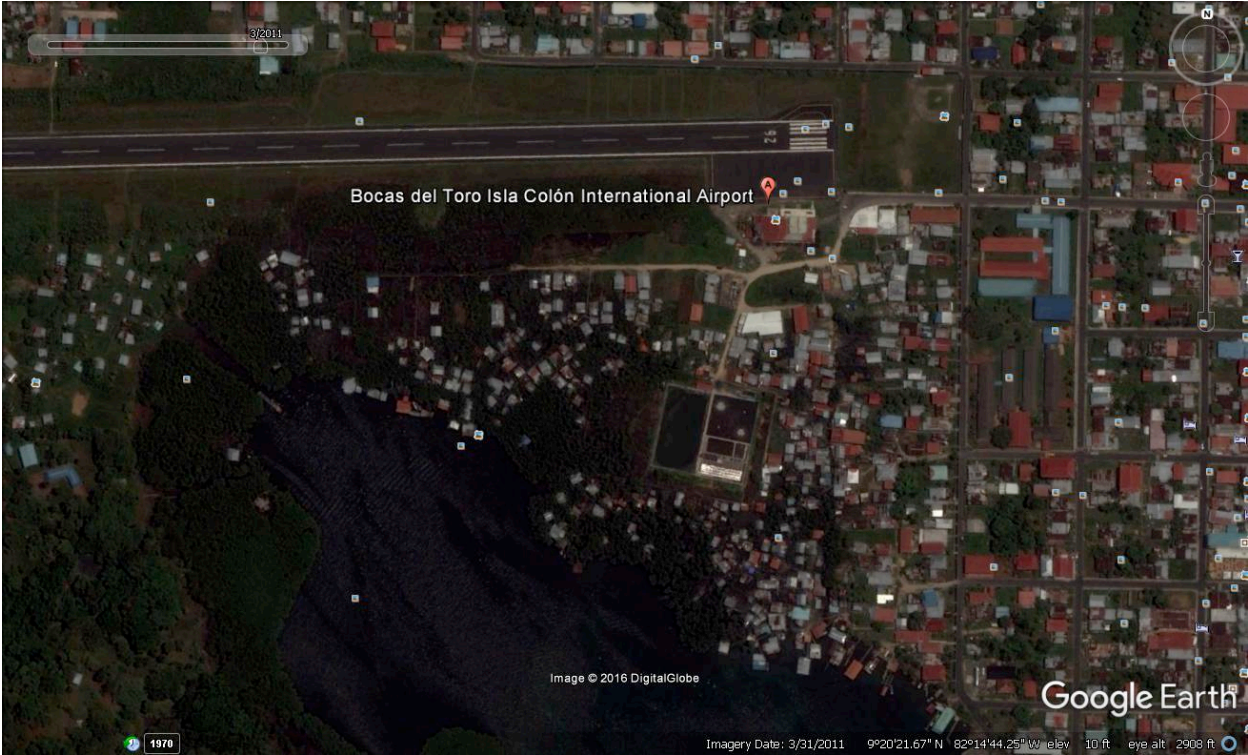


Photo 3: Satellite image of La Solución taken in 2015 (via Google Earth).



Photo 4: Photo of early Bocas town during the United Fruit Company era (via Gran Hotel Bahia website).



Photo 5: Image of La Solución (Aumann 2016).

