Empty Promises: Infrastructure and Colonialism in Contemporary Caribbean Culture

By

Nicole M. Fadellin

A dissertation submitted in partial fulfillment of

the requirements for the degree of

Doctor of Philosophy

(Spanish)

at the

UNIVERSITY OF WISCONSIN-MADISON

2020

Date of final oral examination: 02/04/2020

This dissertation is approved by the following members of the Final Oral Committee:
Guillermina De Ferrari, Professor, Spanish and Portuguese
Paola S. Hernández, Professor, Spanish and Portuguese
Víctor Goldgel-Carballo, Associate Professor, Spanish and Portuguese
Pablo F. Gómez, Associate Professor, History

Abstract

This project examines the ways in which infrastructure leaves its mark within contemporary Caribbean cultural representations. Roads, electrical grids, networks, and nuclear plants become dynamic sites for reflecting on the political, economic, and social issues facing the region at the turn of the twenty-first century. Within a selection of literature and visual culture from the Greater Antilles, I explore the tension between political discourse and material reality, analyzing the promises that infrastructures represent and the embodied experiences of their intended beneficiaries. This exercise ultimately points to the persistence of colonialism in the region, from the aftermath of Cold War developmentalism to the consolidation of aid and debt as forms of global coloniality.

Building upon work by sociologists, anthropologists, and geographers in the growing field of critical infrastructure studies, I develop a methodology for analyzing infrastructure within literature. In addition to literal representations, I examine the diverse ways in which it leaves its mark on the text. I look to setting, characterization, and narrative structure. I explore the ways in which roads, electricity, and water appear through metaphor and metonymy, as well as in rhythm, affect, and imagery. In this way, literature can contribute a unique perspective to critical infrastructure studies.

In the first chapter of this dissertation, the lasting impact of modernization in Puerto Rico manifests itself within literature and visual art through the breakdown of transportation, the electrical grid and, more recently, the financial impasse of an unpayable debt. In the second chapter, I consider speculative fiction that extrapolates emergent technologies within a Caribbean setting. Yoruba and Taino deities play a key role, merging with IT technology and staging a

complex investment in the future. Finally, in the third chapter, I dissect representations of stalled initiatives. I highlight the ecosystem of people, things, and ideas that condition the outcome of projects like a Soviet-funded nuclear plant in Cuba or post-quake reconstruction led by the international community in Haiti.

Acknowledgements

I am beholden to the many individuals, communities, and institutions that have supported this project in its different stages. First of all, I would like to extend my deepest gratitude to my advisor, Guillermina De Ferrari, for being supportive yet uncompromising in her expectations. She pushed me to develop a meaningful research question and then to find my own voice as a scholar. I greatly appreciate her insightful comments and her approach to literary criticism and writing.

Paola Hernández played a decisive role in my formation by introducing me to theater theory and practice. Her courses provided me with dynamic tools for engaging with materiality and semiotics and they instilled me with a passion for theater as a pedagogical tool. I thank Víctor Goldgel and Pablo Gómez for graciously accepting to join my committee. Their incisive questions and bibliographic recommendations were vital for pushing this project forward. Finally, I admire Kata Beilin and Jill H. Casid for their work as scholar-activists. Both have generously provided guidance at key moments of this process.

This project took shape as I moved between the Midwest, the Caribbean, and South

America for personal and professional reasons. I am grateful to LACIS and the Graduate School

for the summer grants that made the initial travel possible, and I am indebted to the institutions

and individuals that have received me in each location. From Havana, Cuba, I thank Yoss,

Maielis González Fernández, Laura Liz Gil Echenique, Erick Mota, and the late Evelyn Pérez for
their generosity with their time and expertise. Evelyn will be greatly missed. She was a vibrant
and dynamic person and writer. I had the honor of meeting several Puerto Rican poets as well.

Through the work and activism of Raquel Salas Rivera and José Ernesto Delgado Hernández, I

was able to follow the constantly evolving situation on the island. From Lima, Peru, my home for the last few years, I thank Milagros Saldarriaga and her team at the Casa de la Literatura for welcoming my collaborations and for the work that they do to make literature more accessible. Last but not least, back in the states, my life-long friend Melissa Vale never wavered in her support, providing childcare, food, and a roof over my head at crucial moments of this process.

At UW-Madison, I appreciated the moral support and professional collaborations shared amongst graduate students, especially Megan Bailon, Marin Laufenberg, Katie Schaag, Andrew Sayler, Joseph Patteson, Valeria Navarro-Rosenblatt, Anna Borovskaya-Ellis, Adrienne Hagen, and Denise Oyuki Castillo. UW alumni Brett White has proven to be a great mentor and travel buddy when we have coincided abroad for conferences and field research. Special thanks are also due to Jaime Vargas Luna for being supportive and intellectually demanding.

This dissertation is marked by the absence of two women. My undergraduate mentor, Susan Martin-Goodrich, shared her passion for Latin America and encouraged me to pursue graduate studies. Although she passed away before I began my Phd, she has been present in memory every step of the way. And to my mother, Cynthia Fadellin, I express deep gratitude for her unconditional love and approval. I wish that I could share this accomplishment with her. Finally, this dissertation has grown alongside my daughter. I thank her for her patience, and I dedicate it to her.

Table of Contents

Abstract	i
Acknowledgements	iii
1. Thinking through Infrastructure	1
1.1 Theorizing Infrastructure	3
1.2 Colonialism and Coloniality in the Caribbean	8
1.3 Empty Promises	12
1.4 Chapter Summaries	15
2. From Operation Bootstrap to PROMESA: Infrastructure and Impasse	18
2.1 No More Promises	19
2.2 Highways and Radio Waves in La guaracha del Macho Camacho	23
2.2.1 Construction and Frustration	26
2.2.2 Matter Strikes Back	29
2.3 Electricity and the Drug Trade in Cualquier miércoles soy tuya	33
2.3.1 Modernity/Coloniality	35
2.3.2 Electricity as Metaphor and Materiality	39
2.3.3 Organized Crime and Vulnerability	43
2.3.4 Becoming Other	45
2.4 Unpayable Debt in "Hay una deuda" and Puerto Ricans Underwater	47
2.4.1 There Is a Debt But It Is Broken	51
2.4.2 There Is a Song But It Is Broken	53
2.4.3 Drowning in Debt	56
2.5 In the Impasse	59
3. The Ghost in the Machine: Caribbean Futurism and IT Infrastructure	61
3.1 A Placeless, Raceless, Bodiless Future	62
3.1.1 Science, Religion, Technology, and Magic	64
3.1.2 Afrofuturism	66
3.1.3 Utopia and Dystopia	67
3.1.4 Information Technology	71
3.2 Cyberspace and Place in <i>Habana underguater</i>	75
3.2.1 Ciberpunk con "i" latina	76
3.2.2 Cuban Connectivity	80
3.2.3 Negotiating Space in Cyberspace	84
3.2.3.1 Information Exchange with the Orishas	85
3.2.3.2 Ochosi as Deus Ex Machina	86
3.2.3.3 Revolutionary AI	88
3 2 3 4 The Return of the <i>Cemies</i>	89

3.3 An Ecological Reading of The 'Nansi Web in <i>Midnight Robber</i>	92
3.3.1 A Pan-Caribbean Cybernetic Utopia	95
3.3.2 The Grande Nanotech Sentient Interface and the Spaces Between	103
3.3.3 Feeling Utopia Through the 'Nansi Web	107
3.4 Looking Backward and Forward	118
4. Between the Pledge and the Wake: Inhabiting the Ruins of Unfinished Projects	120
4.1 From Revolution to Underdevelopment	121
4.2 Shades of Thirst in Aux frontières de la soif	129
4.2.1 Who Owns Haiti?	131
4.2.2 Mirages, Casques bleus, and Tarps	135
4.2.3 The Price of Thirst	141
4.3 Soviet Technology on Cuban Soil in La obra del siglo	150
4.3.1 A Cuban in Space	152
4.3.2 The Project of the Century	157
4.3.3 The Non-Place and the Disaster That Never Happened	164
4.4 In the Wake	171
5. Epilogue: Infrastructural Justice	174
6. Bibliography	178

1. Thinking through Infrastructure

Hurricane Maria struck Puerto Rico in September of 2017. The damage was extensive. The entire electrical grid was wiped out, submerging the island in a blackout that would last not days nor weeks but months. Even after electricity was restored to San Juan, the capital city still experienced frequent outages, and more remote communities would have to wait nearly a year to be reconnected to the grid. The extended blackout made even the most basic daily tasks burdensome and would have a lasting effect on the island. Hundreds of schools were shuttered, tens of thousands of jobs were lost, and over 150,000 people left the island in the first year alone. In many cases, the ill and elderly were unable to receive the care they needed as hospitals closed or attempted to run on generators. The number of casualties attributed to the hurricane and its aftermath has been highly contested, with independent studies and personal testimonies challenging the official statement made by the Puerto Rican government. Amidst the ongoing debt crisis and other forms of physical damage caused by the storm, the blackout would come to represent the precarious conditions for sustaining life on the island.

In "Theorizing Disaster," anthropologist Anthony Oliver-Smith explains that disasters serve as metonymy for the political, economic, and material conditions that determine the level of devastation and who is most impacted. In other words, it is essential to look beyond the spectacularity of the disaster as an event in order to analyze the underlying structural inequities and explore the mutually constitutive relationship between the material and the symbolic. Here, the concept of metonymy is key. While metaphor creates a conceptual link between two things that are "otherwise different," metonymy has the potential to challenge such categories, establishing meaning through "contiguity or associations between part and whole, cause and

effect, thing and attribute" (Oliver-Smith 28). In the case of Puerto Rico, for example, the extended blackout was perceived as the physical manifestation of a range of political, economic, and material conditions: the neglected electrical grid; corruption and poor leadership; the \$72 billion debt crisis; and, above all, Puerto Rico's disavowed colonial status.

For Oliver-Smith, disaster is both a social text and a material reality. The same can be said of infrastructure. In fact, I believe that infrastructure, as an object of study, holds the key for unpacking what Oliver-Smith calls the "social production of disaster" (29). It shapes the distribution of resources and supports the reproduction of everyday life. Although it is theoretically conceived as a public good, access is differential in practice, increasing vulnerability for some and decreasing it for others. At the same time, infrastructure has the potential to ground theoretical analysis. Internet, electricity, water, and roads span various scales of time, space, and social organization, yet they are also mundane and accessible. They facilitate an embodied and socially embedded perspective, providing concrete means for raising questions of political power, sovereignty, citizenship, and the public good.

In this dissertation, I focus on twenty-first century literary and cultural production from the Greater Antilles, covering Puerto Rico, Haiti, Cuba, and Jamaica. Infrastructure is part of a long history of modernization and development in the region. It has been a channel for foreign intervention and local corruption. Also, a means for imagining a different future, for transformation, social change, and liberation. The works selected span this range of impasse and possibility, from the breakdown of reconstruction in post-quake Haiti to a never-ending infrastructural crisis in Puerto Rico, from nostalgia for the abandoned Cuban nuclear dream to speculative fiction that imagines a high-tech future for the Caribbean. In the following pages, I

establish a theoretical and methodological frame for examining infrastructure from a literary perspective. Then, in the chapter summaries, I present three unique approaches, each pointing to a different temporal, affective, and political configuration.

1.1 Theorizing Infrastructure

Critical infrastructure studies took shape in relation to two sites of research: the Internet and the city. Around the 1990s, science and technology scholars like Susan Leigh Star, Geoffrey Bowker, and Paul N. Edwards reflected on the social dimension of information technology. In the following decade, geographers and anthropologists would use infrastructure as a lens to frame their discussions about urban inequalities, proposing concepts like *infrastructural violence* to explore contested access to water, electricity, transportation, housing, and more. The field has since diversified beyond the Global North, with Africa and Asia becoming burgeoning sites of infrastructure-related research. The most recent development for the field has been an incursion into the humanities. After a series of workshops, symposiums, and conference panels between 2015 and 2018, an interdisciplinary collective dedicated to critical infrastructure studies was formed. It is important to note that literary studies as well as a regional focus on Latin America have been underrepresented in this trajectory, and this is where I seek to make a contribution. I will now review some of the core concepts of the field.

In her now canonical essay "The Ethnography of Infrastructure," science and technology studies (STS) scholar Susan Leigh Star argues that infrastructure is invisible until it breaks down.

¹ For example, see Larkin 2008; Chu 2014.

² For more information and a comprehensive bibliography of the field, see <u>cistudies.org</u>.

In other words, it is not until the power goes out, the Internet drops, or a bridge collapses that we begin to pay attention to the details of who built it, who uses it, or how often maintenance occurs. She cautions, however, that this view becomes more complicated if one examines "the situations of those who are *not* served by a particular infrastructure" ("Ethnography" 380).

According to Star, it is precisely the perspectives of those on the margins of a network that are most valuable for understanding the political, economic, and material realities of a system. She calls into question the seeming inevitability of technological developments —of the world as we know it—, reminding us that it could have been otherwise. The pressing question, then, is who benefits from a project as it was carried out. Who has a financial stake? What are the geopolitical consequences? What technologies and materials were used? Why? Where is it located? And how do these factors condition access?

By studying the "pervasive dominations and exclusions" inherent in science, technology, and infrastructure, Star establishes a methodology rooted in a social justice agenda, ultimately seeking to imagine a more just world (Puig de la Bellacasa 50). Feminist STS scholar María Puig de la Bellacasa describes her approach as ecological, explaining that, "Ecological thinking is attentive to the capacity for relation-creation, to how different beings affect each other, to what they do to each other, the internal 'poiesis' of a particular configuration" (52).

This methodology is representative of the material and affective turns within cultural analysis that occurred at the turn of the twenty-first century. The editors of the 2010 anthology *Material Powers: Cultural Studies, History, and the Material Turn* explain that the point of departure for this "new materialism" is the "entanglement" of the human and non-human, the

material and the cultural (Joyce and Bennett 4, 8).³ In the same vein, the affective turn explores the relationship between bodies and matter, paying special attention to "the augmentation or diminution of a body's capacity to act, to engage, to connect" (Ticineto Clough 3).

While the material turn has served as a foundation for critical infrastructure studies, affect theory has been incorporated more slowly. The editors of the 2015 anthology *Signal Traffic:*Critical Studies of Media Infrastructures explain that infrastructure-related affects largely remain "unspoken and unknown, simply because certain kinds of questions have not been asked" (Parks and Starosielski 15). They propose "excavating the various dispositions, feelings, moods, or sensations people experience during encounters with infrastructural objects, sites, and processes" (ibid.). In turn, the editors of the 2018 anthology *The Promise of Infrastructure* explain why this exercise is important. The embodied experience of having access to running water, for example, creates an intimate link between state power, the individual, and the hydraulic public brought into existence by the pipes. In other words, "Infrastructure does not allow state power to disavow itself" (Appel et al. 22).

The idea that infrastructures "press into the flesh," shaping habits and expectations on a daily basis has marked an important shift for the field (Fennell qtd. in Appel et al. 26). Despite all of Star's ground-breaking contributions, her premise that pipes, wires, and bridges are essentially invisible until they break down may have done more harm than good. Anthropologist Brian Larkin notes that it quickly became a trope in the growing field, even though it "is a partial truth and, as a way of describing infrastructure as a whole, flatly untenable" ("Politics" 336). The "invisibility" trope reflects, above all, the privileged experience of the scholars that use it. Larkin

³ In his contribution to the volume, literary scholar John Frow explains how new materialism developed in relation to both Marxist thought and post-structuralist discourse.

notes that he too used this premise in his 2008 monograph *Signal and Noise: Media, Infrastructure, and Urban Culture in Nigeria,* yet he would later come to acknowledge that there is a "range of visibilities that move from unseen to grand spectacles and everything in between" ("Politics" 336). This statement certainly holds true within the corpus of contemporary Caribbean texts selected for this dissertation.

It is also likely that the invisibility trope became ingrained in the field due to the fact that infrastructure is dispersed across multiple scales of time, space, and social organization. This fact, together with the entanglement of many people, institutions, and policies, makes it difficult to pin down what we are talking about when we talk about infrastructure. In a special issue of the journal *Ethnography*, for example, editors Dennis Rodgers and Bruce O'Neill proposed the term infrastructural violence to address the unique evasion of responsibility made possible by dispersion. Along these same lines, literary scholar Rob Nixon considers the challenges faced by authors attempting to represent non-sensational violence in his 2011 monograph *Slow Violence* and the Environmentalism of the Poor. In the following quotation, he conveys the difficulties and the urgency of this task.

Violence is customarily conceived as an event or action that is immediate in time, explosive and spectacular in space, and as erupting into instant sensational visibility. We need, I believe, to engage a different kind of violence, a violence that is neither spectacular nor instantaneous, but rather incremental and accretive, its calamitous repercussions playing out across a range of temporal scales. In so doing, we also need to engage the representational, narrative, and strategic challenges posed by the relative invisibility of slow violence. Climate change, the thawing cryosphere, toxic drift, biomagnification, deforestation, the radioactive aftermaths of wars, acidifying oceans, and a host of other slowly unfolding environmental catastrophes present formidable representational obstacles that can hinder our efforts to mobilize and act decisively. The long dyings —the staggered and staggeringly discounted casualties, both human and ecological that result from war's toxic aftermaths or climate change— are underrepresented in strategic planning as well as in human memory. (Nixon 2-3)

There is an important distinction to be made between infrastructure and the environmental harm that Nixon explores. Deforestation, global warming, and oil spills are indisputable forms of destruction. In contrast, electricity, roads, and nuclear energy elicit contradictory reactions; they are tied up with promises of comfort, modernity, or even national autonomy. These are the tensions explored within the first monographs dedicated to the topic of infrastructure within postcolonial literary and cultural representations. In *Public Works*: Infrastructure, Irish Modernism, and the Postcolonial, Michael Rubenstein explores the diverse ways in which public utilities have left their mark on Irish literature. He focuses on a specific moment, 1922-1940, in which the newly independent Irish State built nation-wide infrastructure and Irish authors simultaneously challenged the division between utility and aesthetics that had been imposed by British colonialism. Postcolonial Automobility: Car Culture in West Africa, by Lindsey Green-Simms, assumes a different approach. This monograph traces the practices, promises, and affective investments attached to the practice of driving within West African cultural representations (literature, plays, film). Above all, she considers the association between mobility and autonomy, on both an individual and national scale.4

Informed by the theories and literary criticism outlined above, I propose the concept of *thinking through infrastructure* as a method of literary analysis. This approach has two registers. The first is diachronic. It explores the historical processes and geopolitical relations that shape an infrastructure project, considering the values and expectations that certain forms of infrastructure

⁴ Over the last decade, a small group of scholars have explored literary and cultural representations of infrastructure through a postcolonial lens. In addition to the two monographs mentioned above, there have been two special issues and one anthology. The three publications include essays about specific Latin American cities, yet there has been no comprehensive study of the topic for the region as a whole, for the Caribbean, or for specific countries. See Rubenstein et al. 2015; Yaeger 2007; and Boehmer and Davies 2018.

represent, as well as how they are built, managed, and maintained over time. These details appear in literature in multiple ways: through setting, intertextual references, or the relationship between the past, present, and future. The second register proposes a certain way of reading. I attempt to see, hear, and feel a literary text through infrastructure. I circle around an idea like electricity, the Internet, or drinking water, and I pay attention to its material and phenomenological properties as they appear within rhythm, imagery, and figurative language. I develop this approach across six literary texts, and I juxtapose these readings with an analysis of a photograph in the first chapter and an independent film in the third chapter. Whether applied to the written word or visual culture, the two registers of *thinking through infrastructure* allow me to zoom in and out across spatial and temporal scales in order to contrast the perspectives of different characters, explore affective investments, excavate the past, and imagine hypothetical scenarios.

1.2 Colonialism and Coloniality in the Caribbean

The topic and regional focus of this project was the result of several influential readings and experiences. The first was *La guaracha del Macho Camacho*, a novel published in 1976 by Puerto Rican author Luis Rafael Sánchez. To this day, I am enraptured by its experimental form, its relentless criticism of colonialism and local politics, and the fact that the entire novel takes place during a traffic jam on a Wednesday afternoon. Through *La guaracha* and a selection of other contemporary Caribbean novels, I gravitated toward the concept of crisis within contemporary Caribbean literature, paying special attention to the treatment of time and the ethical questions raised. Ultimately, a literary event would give definite form to this project. At

⁵ In addition to the corpus studied in this dissertation, influential authors included Ana Lydia Vega, Zoé Valdés, Pedro Juan Gutiérrez, Patrick Chamoiseau, Lyonel Trouillot, Frankétienne, Kettly Mars, and Rita Indiana.

the *Encuentro de Jóvenes Escritores* in Havana, Cuba in 2016, I met several Puerto Rican poets who instilled me with a sense of urgency and responsibility. I have followed their literary work and activism closely as they respond to the debt crisis and, more recently, to Hurricane María.

As an academic born in the Global North, I seek to understand the impact of colonialism in the region, especially the ways in which the US continues to intervene. It was important for me to select a corpus and develop an approach that do not further exoticize the Caribbean. This concern pushed me to question my interest in crisis (and by extension disaster), until I finally arrived to infrastructure as an object of study. I believe this framework provides tools for responding to the urgent situations in Haiti and Puerto Rico while, at the same time, exploring broader themes like colonialism, decolonization, and affective investments in the future. Finally, the concept of infrastructure provides a direct link between the legacy of European colonialism in the Caribbean and less overt forms of colonialism, such as economic and political policies framed as modernization, development, or international aid.

Unpacking the colonial legacy and ongoing forms of domination in the region is a persistent theoretical problem within Caribbean Studies. It has been approached through many angles: the hybridity of language and cultural forms; relationship to land and the environment; conceptions of race, gender, and sexuality; discussions about sovereignty and ethics; or the confrontation of systems of knowledge and belief. This dissertation is indebted to two works in particular. First, *Consuming the Caribbean*, by Mimi Sheller, is a sociological study that traces the relationship between contemporary patterns of consumption and the violent history of slavery and colonialism in the Caribbean. Methodologically, she spans expansive temporal and geographic scales by focusing on specific assemblages of people, ideas, and things. On an ethical

and personal level, her examination of the academic consumption of the Caribbean pushed me to interrogate my own role in this process. The second work, *Vulnerable States: Bodies of Memory in Contemporary Caribbean Fiction*, by Guillermina De Ferrari, considers the material body as a site of negotiation in late twentieth century Caribbean literature. She explains that European forms of knowledge production —ethnographies and the natural sciences, for example— defined and controlled non-European bodies, and she analyzes the diverse ways in which contemporary texts reclaim the vulnerability of the body, thus challenging the enduring legacy of this symbolic colonization.

To engage both the persistence of colonial power structures and more elusive forms of twenty-first century domination, I use the term coloniality. First employed by sociologist Aníbal Quijano in the early 1990s, the term refers to the entanglement of hierarchies resulting from the conquest and colonization of Latin America and the Caribbean. This violent encounter consolidated an economic model (global capitalism, extractivism) and privileged certain ways of being (white, European, Christian, heterosexual, male).6 At the turn of the twenty-first century, Quijano's concept would serve as the basis for a collective intellectual project known as the modernity/coloniality working group. This effort has involved scholars throughout Latin America and the Caribbean, such as Quijano, Walter Mignolo, Enrique Dussel, and later Santiago Castro-Gómez, Ramón Grosfoguel, Edgardo Lander, Catherine Walsh, and Sylvia Wynter. Above all, I am interested in the way that this group of scholars draws attention to the fact that colonial hierarchies are embedded in and reproduced through certain ways of knowing

⁶ See Quijano 2007 for a discussion of his development of the concept over time.

(rational, objective, universalizing) and seemingly universal concepts like progress, liberty, or equality.

I find the work of Sylvia Wynter and Santiago Castro-Gómez particularly compelling. As philosophers, I believe they are able to explain the concepts in a way that is easy to grasp. Wynter, for example, describes coloniality as the creation of *Man* at the expense of humanity, since one particular "genre" of Man over-represented his particular position as if it were the universal definition of what it means to be human (Wynter 115). She explains that this overrepresentation of Man was consolidated through several epistemological developments that legitimized his claims of universality and superiority. She cites, for example, the positivist view of linear development for natural organisms and societies that took hold in the nineteenth century. In a similar vein, Santiago Castro-Gómez coined the term hybris del punto cero to refer to a series of intellectual claims, like Cartesian dualism, that led Enlightenment thinkers to believe that they had the linguistic and cognitive capacity to objectively document the world around them. This attitude, he argues, served as the basis for the delegitimization of other approaches to knowledge and for the development of the human sciences (anthropology, sociology, geography, etc), which used the colonies as an object of study.

These assertions are not new to postcolonial theory. My main motivation for using the modernity/coloniality framework is to more directly link European colonialism to contemporary forms of domination like Cold War modernization and development in the twentieth century, or debt, aid, and humanitarian intervention in the twenty-first century. Drawing a link between these diverse forms of international intervention, I am interested in the shifting discourses and justifications used over time. Sociologist Ramón Grosfoguel explains, for example, that the

religious mission of the sixteenth century gave way to the civilizing mission of the eighteenth and nineteenth centuries. This, in turn, would become the "developmentalist project" of the twentieth century, and financial restructuring and military interventions under the banner of "democracy" and "human rights" in the twenty-first century ("Decolonizing"). I situate my project at the turn of the twenty-first century, amidst the waning of developmentalism and the consolidation of aid and debt as forms of global coloniality.

1.3 Empty Promises

The 2018 anthology *The Promise of Infrastructure* is the result of a series of panels at the American Anthropological Association between 2010-2013. It is a valuable contribution to critical infrastructure studies since it explores the tension between political promises and embodied experience. Editors Hannah Appel, Nikhil Anand, and Akhil Gupta explain that material infrastructures "have long promised modernity, development, progress, and freedom to people all over the world" (3). And while roads, electrical grids, pipes, and networks have facilitated the circulation of people, things, and ideas, they have also enacted the differentiation and exclusion that liberal modernity is built upon, "guaranteeing the liberties of some through the subordination, colonization, and racialization of others" (3-5). This contradiction is one of the central themes that I explore throughout this dissertation.

The editors of the volume define their approach in relation to dialectical materialism and new materialism. They argue that while Karl Marx and Louis Althusser referred to infrastructure in a metaphorical sense, many new materialists have gone to the other extreme, focusing too intently on matter, imbuing it with primacy, vitality, or agency. The essays selected for the

volume, in contrast, present material reality as inseparable from discourse. Through the concept of "Infra Politics," for example, they explain that the "immediacy and intimacy of infrastructures" is a constant reminder of the presence of the state in everyday life (22). In this way, roads, pipes, and networks —or even the idea of them—bring "publics" into existence that are then able to make demands of the state. In this dissertation, I have referred to the same populations as the "intended beneficiaries" or "intended recipients," terms that reflect the vocabulary used by developers and aid workers.

The anthology is organized into three sections: "Time," "Politics," and "Promise." Brian Larkin's contribution appears in the section on promise, yet he provides a comprehensive view of the interrelation between these three concepts. He explains, for example, the temporal logic of the promise and its consequences:

A promise can refer to a vow, or a commitment, but its other meaning refers to the coming to be of a future state of affairs, the idea we have that someone or something holds promise. Its referent is not to the here and now of things but to an uncertain future that infrastructure is to bring about and institutes a temporal deferral that refuses to deliver something in the present. It involves both expectation and desire, frustration and absence. ("Promising" 181)

The promise invites affective investment and, at the same time, defers fulfillment. As a "promising form," then, infrastructure can be used by politicians to activate client-patron relationships, mobilize funds, accomplish geopolitical aims, and shape expectations, regardless of whether or not the project is completed. For Larkin, "This is why roads disappear, factories are built but never operated, and bridges go to nowhere" ("Politics" 334).

The extended quotation also hints at how the promise is perceived and experienced by the people that expect to use the services. The relationship to the future involves uncertainty, and the

promise of an infrastructure project becomes highly charged with potentiality, both positive and negative. In this sense, the promise evokes complex and contradictory emotions, and gives rise to a range of temporal and affective configurations. I believe that literature provides a privileged medium for exploring these complex scenarios through concepts like haunting and debt, utopia and dystopia, nostalgia and speculative futurism.⁷

Through literary analysis, then, I build upon Larkin's theoretical contributions to critical infrastructure studies. Specifically, I work with his conceptualization of the promise, which I break down into the *pledge* and the *wake*. The pledge, as inferred above, refers to the speech act that initiates a chain of events and expectations. The pledge commits to carrying out an infrastructure project that is intended for the public good. In practice, however, this is no guarantee of construction, maintenance, or socially just planning. The concept of the pledge engages with the historical context represented within each literary text and, ultimately, teases out more elusive forms of enduring colonialism in the contemporary Caribbean.

The wake refers to everything that follows the pledge. It highlights the material, temporal, and affective aspects of infrastructure. It takes into account the damage, destruction, and harm caused by coloniality, conveying the weight of the past as it pushes through the present and onto the future.⁸ The wake draws attention to the political and economic gain that a project garners for a select few as well as the embodied experience of users, partial users, and non-users. It includes not only functional infrastructure or a staggering breakdown but also everyday exclusions and differential access. It even contains the memories of projects that were never

⁷ See Berlant 2011, for an exploration of the contradictory affective investments provoked by the promise of the good life in the Global North.

⁸ See Sharpe 2016, for a theorization of the multiple valences of the wake as it relates to the contemporary experiences of Black Americans.

built. The wake is a space to consider the interaction between expectation and reality. I also believe that it holds space for the possibility of changing course.

1.4 Chapter Summaries

The first chapter provides a diachronic look at the impact of modernization over time within Puerto Rican literature and visual culture. *La guaracha del Macho Camacho* by Luis Rafael Sánchez serves as the point of departure. Although it escapes the general temporal scope of this dissertation, the novel, which portrays an unbearable traffic jam in San Juan, is indispensable for discussing the material traces of modernization. I then consider how *Cualquier miércoles soy tuya* by Mayra Santos Febres presents a similar scenario in the capital city at the turn of the twenty-first century. Here, a dysfunctional electrical utility takes center stage, appearing alongside the illicit drug trade and raising questions about ethics and the public good. Finally, recent responses to debt restructuring through poetry and visual culture are contextualized aesthetically, politically, and economically within this trajectory. It is important to note that my analysis was completed before Hurricane María struck the island, thus highlighting the underlying conditions that were exacerbated by the tropical storm.

In the works analyzed, traffic jams, blackouts, and austerity reflect experiences of everyday life on the island and serve as metonymy for broader issues of neocolonialism and corruption. Frustration is the overwhelming affect, accompanied by a temporal and spatial structure of impasse. Racial, gender, and class divisions shape the experience of infrastructure, yet auditory and haptic phenomena create brief moments of communion across social divides. In

this way, representations of highways, electrical grids, and debt elicit multiple and contradictory readings.

In the second chapter, I consider two novels that extrapolate emergent technologies
—nanotechnology, quantum computing, and artificial intelligence— within a contemporary
Caribbean setting, thus challenging biases in the science fiction community that view Latin
America and the Caribbean as isolated in time and space from cutting-edge technological
innovations. These futuristic technologies allow both authors to project hypothetical political
configurations. In *Habana underguater*, Erick Mota portrays an alternate ending for the Cold
War, in which the Soviet Union wins and later retires to space, using a global network to surveil
and manage its imperial holdings on earth. In *Midnight Robber*, Nalo Hopkinson imagines a
personified quantum network that crosses space and multiple dimensions in order to create a
utopia for a pan-Caribbean population. Yoruba and Taino deities are woven into the fabric of
these technologies and narratives; these non-human characters drive the plot and introduce
ethical dilemas. Ultimately, the seemingly immaterial nature of information technology is
grounded in a visceral, embodied experience and a critical attitude that seeks to understand what
values and which institutions manage the technologies that mediate contemporary life.

In the third chapter, I compare an unlikely pair of works: an independent film about an abandoned nuclear plant in Cuba and a novel about the breakdown of post-quake reconstruction in Haiti. *La obra del siglo*, directed by Carlos M. Quintela, is set in the year 2012, twenty years after the nuclear project was halted, and *Aux frontières de la soif*, by Kettly Mars, is set in 2011, one year after a devastating earthquake. Both works are temporally and affectively complex. They portray unfinished projects with no clear path forward. The experimental film intersperses

official archival footage about the Soviet-funded 'Project of the Century' with narrative sequences that follow a nuclear engineer and his family living in what is now a ghost town. The novel contrasts the moral dilemmas of a privileged male protagonist with the perspectives of several people living in the informal post-quake settlement. Frustration and resentment are present in both works, yet they are complicated by a persisting attachment to an imagined future. Dream-like sequences haunt the characters through nostalgia, guilt or fear. They also create a space for imagining alternative —hopeful, wistful, or vengeful— outcomes.

The pairing of these two works is not gratuitous. On one hand, both works explore more elusive forms of colonialism that are framed as assistance; specifically, Soviet developmentalism in *La obra del siglo* and intervention by the international community under the banner of democracy in *Aux frontières de la soif*. On the other hand, both Cuba and Haiti have typically been studied in isolation due to a perceived incommensurability with other societies in the region, and even the world. Likely the result of their revolutionary histories, this phenomenon obscures shared experiences in the region. By putting these two works in dialogue with each other, and with other works from the Caribbean, I highlight how colonialism and coloniality affect the region in many different ways.

2. From Operation Bootstrap to PROMESA: Infrastructure and Impasse

"Frena, guarachea, avanza, frena, guarachea, avanza, frena, guarachea, avanza" (Sánchez 155-6). This hypnotizing quotation could be considered a one-line summary of La guaracha del Macho Camacho by Luis Rafael Sánchez. The 1976 novel, whose central event is a traffic jam, is notable for its lack of linear plot development. The narrative voice weaves between perspectives as the characters wait—physically or psychologically immobilized—at 5pm on a Wednesday afternoon. The blazing sun glints off of a sea of cars. The tension is palpable in clenched jaws, white knuckles, blaring horns, and expletives as the cars inch forward. Inadequate highways and blacked-out traffic lights have created an insufferable traffic jam. Meanwhile, the song "La vida es una cosa fenomenal" fills the air, playing in unison from every radio. The tune works its way into the minds and under the skin of the drivers. They find themselves, some of them against their will, humming, tapping, and gyrating to the music. The multitude brakes, moves forward, dances, ad infinitum.

The dramatic traffic jam in *La guaracha del Macho Camacho* draws attention to the concept of infrastructure. What is it intended to do? For whom? And what is the effect of infrastructure upon the mind and body? In the analysis that follows, I will consider two novels, a poem, and a photograph in which infrastructure gains an overwhelming presence and leads to a sense of impasse. I will look to the material traces of infrastructure within these cultural representations in order to explore how it is related to modernization and colonialism in Puerto Rico. First, I will consider highways and radio waves in *La guaracha del Macho Camacho* before I move onto more immaterial forms of infrastructure, such as electricity in the 2002 novel *Cualquier miércoles soy tuya* by Mayra Santos Febres, and finally the national debt and

accompanying austerity measures explored in the 2016 poem "Hay una deuda" by Mara Pastor, and the 2016-2017 portrait series *Puerto Ricans Underwater* by Adál Maldonado.

2.1 No More Promises

In response to the debt crisis, the US federal government passed PROMESA, the Puerto Rico Oversight, Management, and Economic Stability Act in 2016. Rather than provide relief to the Puerto Rican people, PROMESA prioritized US investors, gave unchecked authority to a Fiscal Control Board, and imposed extreme austerity measures on Puerto Rican citizens. A transnational protest movement quickly took shape around the slogan "Se acabaron las promesas." Many academics have also joined the call to arms, most notably through the public humanities initiative #puertoricosyllabus. The collective project explores the origin of the Puerto Rican debt crisis, examining topics like the history of colonialism on the island, sovereignty, migration, natural disaster, resistance, and even infrastructure. In this chapter, I seek to contribute to this growing conversation by shedding light on the failures, inequities, and disavowals inherent in Operation Bootstrap and exploring how they continue to affect Puerto Rico.

Operation Bootstrap (or *Operación manos a la obra*) sought to modernize Puerto Rico between the 1940s-1970s through a series of economic and social projects started under Governor Luis Muñoz Marín. The name made reference to the idiom "pulling oneself up by the bootstraps" and thus called upon the Puerto Rican people to work hard in order to modernize the country despite scant resources. In this regard, it was a command, and a promise to the Puerto

⁹ See https://puertoricosyllabus.com.

Rican people that government policies would support these efforts and facilitate economic growth. It is significant, however, that Operation Bootstrap entailed tax breaks, privatization, and accommodations aimed at foreign investors.

In his 1986 monograph *Economic History of Puerto Rico: Institutional Change and Capitalist Development,* historian James Dietz explains that according to external markers like GNP, Operation Bootstrap appeared to be successful. US developers even described modernization in Puerto Rico as a "miracle," and within the context of the Cold War the island was touted as a "showcase of democracy" (Dietz 244). Dietz stresses, however, that it is important to analyze how growth is measured since the manufacturing firms that set up shop in Puerto Rico received full tax exemptions and resisted integration into the local economy. In other words, most profits left the island. Wages became the only measurable benefit left to Puerto Rico, and generally they were kept as low as possible.¹⁰

Low-skilled textile jobs were eventually replaced by higher-skilled, slightly higher-paid positions in petrochemical and pharmaceutical plants and, by the twenty-first century, Puerto Rico had developed one of the world's largest pharmaceutical industries. It should come as no surprise, however, that when the tax exemption provided to US companies by Section 936 of the Internal Revenue code was phased out in 2006, many pharmaceutical companies left the island and triggered a severe recession. The issuance of Puerto Rico's unique triple tax exempt bonds deferred crisis while also running up the national debt. In this way, the \$72 billion debt held by

¹⁰ Dietz does not speak of failed development but rather of misdevelopment. He notes that Operation Bootstrap marked a dramatic shift from the development policy of the previous decade, which he describes as an "equity-withgrowth" model based on land reform, the expropriation of large sugar plantations, agricultural diversification, and investment in local businesses and industry (243).

the Puerto Rican government can be directly linked to the process of export-based industrialization that began almost seventy years earlier.

I intentionally use the term modernization —rather than development— in this chapter. While both terms share a general connotation of forward-oriented change toward a desired outcome, modernization is also used to refer to the specific transition from a traditional, agrarian society to a modern, industrial society. In this sense, Operation Bootstrap forever transformed Puerto Rico. Geographer Déborah Berman-Santana explains that rapid industrialization relied upon a rural labor surplus. Due to the lack of support for agriculture and the promise of higher wages in the cities, a massive rural-to-urban migration occurred. The capital in particular was paralyzed by overpopulation, insufficient infrastructure, underemployment, and growing inequality. In other words, Operation Bootstrap made lofty promises to the Puerto Rican people while in reality it prioritized benefits for US businesses and Puerto Rican elites (Berman-Santana 113).

The austerity measures imposed under PROMESA can be understood as a consequence of the short-sighted policies put in place under Operation Bootstrap and, at the same time, as a form of twenty-first century colonialism. In the essay "Decolonizing Post-Colonial Studies," sociologist Ramón Grosfoguel argues that twentieth century developmentalism gave way to a "global coloniality' imposed by the United States through the International Monetary Fund (IMF), the World Bank (WB), the Pentagon, and NATO." Military interventions in the name of human rights and debt became the new strategies of intervention. These models were deployed throughout the world yet, as a colony of the US, Puerto Rico was again in the eye of the storm.¹¹

¹¹ In her analysis of Operation Bootstrap, geographer Déborah Berman-Santana quotes official US government documents that describe Puerto Rico as a "development laboratory" (90).

Originally proposed by sociologist Aníbal Quijano, coloniality refers to entanglement of hierarchies resulting from the conquest and colonization of Latin America and the Caribbean, which consolidated an economic model (global capitalism, extractivism) and privileged certain ways of being (white, European, Christian, heterosexual, male). Quijano developed this theory in response to the marginalization of the former colonies in the global economy and the persistence of racialized hierarchies and other forms of colonial violence within postcolonial Latin American society. In the case of Puerto Rico, I believe the concept of coloniality is particularly powerful given its ambiguous status. With the establishment of the Commonwealth of Puerto Rico in 1952, the US officially declared to the United Nations that the island had obtained the "full measure of self-government" and was no longer a "Non Self-Governing Territory" (Dulles). Despite this disavowal, the US continues to exert its authority over the island to this day. The texts that I analyze show that the impact of coloniality —within Puerto Rican society and on the nation as a whole—is undeniable.

Following in the path of Sylvia Wynter and Santiago Castro-Gómez, I am also interested in the ways in which coloniality manifests itself within culture and thought. These two philosophers suggest that a series of epistemological developments dehumanized non-European populations and discredited non-European forms of knowledge. Both scholars question the idea of a rational, autonomous subject that believes itself to be objective and uncontaminated by the material world. In this chapter, I consider how various literary works, and one work of visual art, elaborate a similar critique. In the case of the two novels, this is achieved in part through a privileged male character who becomes more receptive to the material or social world around him. In all of the works considered, this critique is also carried out through a subtle but powerful

experimentation with the senses and materiality. Specifically, I explore the ways in which infrastructure exerts its influence on the attention and actions of the characters. Finally, I argue that it even influences narrative structure, conveying an overwhelming sense of impasse that can be felt by the reader or spectator.

Both Operation Bootstrap and PROMESA contain subtle but potent promises of forwardoriented improvement through modernization and debt relief. The traffic jams, blackouts, deadly
drug trade, and austerity measures that pervade the novels and poems selected leave little doubt
as to the sincerity of the populist promise of Operation Bootstrap or the acronym PROMESA. In
sum, these "promises" are articulated as universal yet rely upon exclusion at both the
international level and within Puerto Rican society. In the following sections, I will explore the
resulting combination of momentum and deadlock through an analysis of affective responses to
the traffic jam in *La guaracha del Macho Camacho*, blackouts and dead-ends in *Cualquier*miércoles soy tuya, and crushing debt in "Hay una deuda" and *Puerto Ricans Underwater*:

2.2 Highways and Radio Waves in La guaracha del Macho Camacho

Over the last 40 years, *La guaracha del Macho Camacho* has received extensive critical attention. From the exasperating traffic jam and mesmerizing song to the experimental language and narrative structure, the treatment of neocolonialism and consumerism, and finally the subversion of the Puerto Rican literary and intellectual canon, there is little that has not been written about this ground-breaking novel. Before I take a closer look at how the traffic jam interacts with forms of often overlooked infrastructure in the novel, I will review what I consider to be a decolonial reading of the novel and then discuss critical approaches to the traffic jam.

In *Paternalismo y literatura en Puerto Rico*, Juan Gelpí describes *La guaracha del Macho Camacho* as an incisive and at times ambivalent parody of *Insularismo*, the 1934 essay by Antonio S. Pedreira. He examines how the novel subverts the approach to knowledge set forth in the canonical essay. For example, Pedreira writes with a magisterial tone representative of an elitist social class that presents its perspective as absolute truth and suggests that a strong male figure is needed to protect and guide his "subordinates" (Gelpí 58). *La guaracha*, in contrast, has no paternalistic *logos* (Gelpí 66). It includes multiple perspectives and, in several cases, the characters become physical manifestations of Pedreira's paralyzing diagnoses for Puerto Rico. *El Nene*, for example, is the hydrocephalic son of *La Madre*, who prostitutes herself to Senator Reinosa. The toddler is covered in his own drool, and his brain surrounded by water due to his condition. Gelpí suggests that *El Nene* embodies Pedreira's demeaning metaphors for the Puerto Rican nation: *infantilism*, *insularism*, and *illness*.

The drool, or *baba*, also refers to the incompetent rambling of the privileged male characters and, by extension, to the elitist discourse exemplified by Pedreira (Gelpí 66). The final scene of the novel stages a fatal confrontation between this oligarchy and the popular classes. The spoiled teenage son of the senator runs over the hydrocephalic toddler, who dies a horrific death. According to Gelpí, this accident perverts yet another metaphor from *Insularismo*: the nation as a ship adrift. He argues that the collision consummates a vendetta narrative between two dysfunctional family triads that distort the paternalistic metaphor of the *gran familia puertorriqueña*. And finally, Gelpí suggests that this grotesque transformation of *Insularismo*'s metaphors in *La guaracha* can be read as a vendetta against Pedreira's influence. In both content and methodology, I believe that Gelpí's essay serves as a model for decolonial analysis. Above

all, I am interested in his focus on affect and materiality, his use of metalepsis to create a web of associations, and his thorough consideration of parody and ambivalence.

While Gelpí was the very first to note *Insularismo* in the pages of *La guaracha del* Macho Camacho, there are other themes that have been recurrent in criticism of the novel; for example, the tension between the traffic jam and the catchy song that plays on the radio. The reading of the gridlock as impasse has been unequivocal, both as representation of the colonial model of development and of the political stalemate regarding Puerto Rico's status in the 1970s (Beauchamp; Díaz Quiñones; Acosta). In contrast, interpretations of the infectious tune have varied from distraction to possible liberation. Earlier Marxist interpretations of the novel highlight the hypnotizing effects of the popular song, tellingly named "La vida es una cosa fenomenal," which purports happiness while distracting from the exploitation of the popular classes (Beauchamp; Chadwick). More recent studies of the novel have focused on the role of radio, popular music, and sound in community building (Tineo; Ríos). I find most convincing the interpretations that situate the song within the experimental treatment of language in the novel. The inclusion of the song—alongside literary references, advertising jingles, political slogans, and telenovelas— has been read as a form of literary experimentation that subverts the traditional conception of the novel and forges a new concept of "culture" (Barradas; De Maeseneer; Dalleo). My analysis will diverge from all of these approaches since it relates the force of the song to the materiality of the radio tower within a broader context of modernization.

2.2.1 Construction and Frustration

While the traffic jam represents economic or political impasse and the popular song can be understood as distraction or liberation, both are the result of construction projects related to modernization between the 1940s and 1970s. This construction appears in the novel in the form of highways, radio towers, condominiums, and electrical grids. The 2005 critical edition of the novel, prepared by Arcadio Díaz Quiñones, contextualizes passing references to the construction of private condominiums, of the mega mall *Plaza Las Américas* and its North American chains, such as *Sears* and *Penneys*, of bridges and the development of *Avenida Roosevelt*, and finally of motels accompanying the growing highway system. Despite the fact that references to these specific buildings and roads have been analyzed in relation to North American imperialism and consumerism, affective responses to these structures, and construction in general, have been overlooked.

In the first interruption by the radio station, the disk jockey boasts of the infrastructure which makes the transmission possible. He introduces the "desfile de éxitos de la radio antillana, trasmitido por la primera estación radiodifusora o primera estación radioemisora del cuadrante antillano, con super antena trepada en el superpico del super país" (Sánchez 117). The superlative language paints Puerto Rico as exceptional within the Antillean context. In his analysis of repetition and the language of mass media in *La guaracha del Macho Camacho*, Arnaldo Cruz argues that repetition is used to create an association between a need or value and an object or person. In *La guaracha*, however, the excessive repetition exposes this mechanism and has the inverse effect, denaturalizing the association. While Cruz analyzes the repetition of socio-linguistic markers of distinction used by or about the different characters, I argue that the

abundance of superlatives in this opening transmission by the DJ satirizes the concept of the Puerto Rican miracle as a model for a non-socialist "third world." ¹²

Satire aside, the "super antenna" seems to live up to its reputation, spreading the guaracha like the "plague" (Sánchez 286). The transmission of "La vida es una cosa fenomenal" and the interventions by the DJ experience no interruption in service. The song invades not only the bodies and minds of the characters but also the language and structure of the novel. Through repetition, popular language, and rhythm, the novel feels like popular music. In fact, Joseph Chadwick explores how the novel fetishizes itself like a hit song through repetition and "self-proclaimed novelty" (64). I would like to add a reading of the musicality of the novel as proof of the materiality of the superpico and as a key component of the sway between momentum and impasse.

The contradictory responses to the radio transmission —it is perceived as mesmerizing, enjoyable, overwhelming, and irritating— are inextricably linked to the tension created by the traffic jam. Stuck at a blacked-out traffic light, a man with his jaw tense and stomach twisted with anxiety repeats ad nauseam, "el país no funciona" (Sánchez 113). The repetition of this short phrase conveys urgency and desperation; it spreads like a virus, from the muttering mouth of the driver to the lips of *La Madre* as she waits in an apartment, sweating in the nude, for her rendezvous with Senator Reinosa. As she sweats in the nude, *La Madre* repeats: "porque se fue la luz, porque la luz se va todas las tardes, porque la tarde no funciona, porque el aire acondicionado no funciona, porque el país no funciona" (Sánchez 113). While the successful

¹² The term Third World emerged within the context of the Cold War, as the First World, led by the US and NATO, and the Second World, composed of the USSR and its allies, vied to extend their sphere of influence in the non-aligned countries of Asia, Latin America, and Africa. For more information about the role of Puerto Rico in this geopolitical context, see Berman-Santana 1998.

construction of the super antenna can be felt through the mesmerizing sway of the radio transmission, the inability of electrical plants and grids to keep up with rapid industrialization is conveyed through sweat, clenched jaws, and exasperation.

The contradictory sensations continue to mount if we take into consideration another form of infrastructure within the same short chapter: the bustling desarrollo vertical of San Juan in the 1970s (Sánchez 107). While waiting for the senator in an apartment, ready to receive him as she lounges in the nude, La Madre saunters over to the window, peeks out of the curtains, and coyly glimpses at the construction of a private condominium: "Filántropa, regala los ojos a la construcción ajetreada de un condominio" and "Filántropa es y como tal regala los ojos a la construcción ajetreada de un condominio" (Sánchez 107, 112). This curious description combines the affected performance of seduction that La Madre learned from soap operas like El hijo de Ángela María with the self-congratulatory discourse of investors who profit off the urban development of Puerto Rico. As in the rest of the novel, the language throughout the section is repetitious, rambling, and playful; a hybrid of slang and 'sophisticated' cultural references weaves between first and third person, directly addressing the reader at times. By paying attention to the nuances of language in the first interventions by the DJ and La Madre, I contextualize the traffic jam within a broader context of modernization. These subtle references assume the discourse of developers in order to reveal geopolitical intentions, false generosity, and paternalism. ¹³ La guaracha is not just about a traffic jam or impasse, but instead merges movement and impasse, construction and frustration, in order to highlight the complexity of modernization.

¹³ My analysis of these scenes is indebted to the information included in the critical edition prepared by Arcadio Díaz Quiñones, yet these subtle details have generally been overlooked by criticism.

2.2.2 Matter Strikes Back

Almost all of the characters in the novel are receptive or vulnerable to the material objects around them, effectively blurring the boundary between subject and object. I understand this as a critique of the autonomous subject in favor of a feeling, sensing subject that is more in touch with its surroundings. Perhaps the character that best exemplifies this gesture is ironically Benny, the spoiled son of Senator Reinosa and aspiring socialite Graciela Alcántara y López de Montefrío. Benny's fetishistic relationship with his Ferrari is so intense that the two merge together. ¹⁴ I suggest that the mechanics of the fetishistic relationship do not follow the Marxist commodity fetish, which is driven not by materiality but by the socially determined exchange value. Marx goes so far as to say that, "not an atom of matter enters into the composition" of the commodity (Marx, Chapter 1, Section 3). In *La guaracha del Macho Camacho*, as we shall see, the Ferrari dramatically and grotesquely returns matter to materialism.

In the anthology *Border Fetishisms: Material Objects in Unstable Places*, anthropologist Peter Pels distinguishes between the "spirit *in* matter" and the "spirit *of* matter." Pels understands the spirit *in* matter as a way to describe Arjun Appadurai's animistic approach to materiality. In other words, "things have no meanings apart from those that human transactions, attributions, and motivations endow them with" (Appadurai 5). In contrast, the spirit *of* matter proposed by Pels refers to "animism with a vengeance [...] matter strikes back," with the fetish object being a key example of matter whose magical sway over individuals cannot be explained by the object's meaning, values, or uses in society (Pels 91).

¹⁴ See Chadwick 1987; Recio Ferraras 1984. Chadwick understands Benny's obsession with his Ferrari as a Freudian sexual fetish. Recio Ferraras associates the anthropomorphic characterization and deification of the car with the banal and frivolous youth dialect criticized in Sánchez's essay "*La generación o sea*."

Border Fetishisms explores the role of fetishized material objects in colonial and postcolonial spaces. A unifying thread throughout the contributions is the work of anthropologist William Pietz, who traced the etymology of the fetish back to colonial encounters along the coast of West Africa in the sixteenth and seventeenth centuries. Initially, Portuguese traders used the term feitiço to describe the sway of African religious objects. Dutch merchants later applied the term to any object whose value within West African society escaped the mercantilist rational calculation of value. In these colonial encounters, Pietz explains that Europeans used the term fetish to describe the "incomprehensible mystery of the power of objects" (14). He stresses that the term implies a disdain toward anything that seems to escape logic and reason as well as anyone that attributes a magical sway or "irreducible materiality" to objects (7, 14).

In *La guaracha* we first encounter Benny in the traffic jam, where he laments that the highways in Puerto Rico are not good enough for his Ferrari. He is concerned that his Ferrari will get an inferiority complex, so he asks his father, Senator Reinosa, to build a racetrack worthy of his precious car. This detail resonates with the construction of luxury condominiums, on one hand, and seems unthinkable amidst the insufficient development of basic utilities like electricity, on the other. Benny has a fetishistic relationship with his car, the quintessential object of modernization, inextricably linked to the highways and traffic jams explored above. He personifies the car to an absurd degree and the narrator indulges with an abundance of detail about, what one could call, their relationship. Benny offers the Ferrari a spoonful of food, as if the car were a young child. The Ferrari turns it down, full and hiccuping with rosy cheeks (Sánchez 212). Benny is with the Ferrari every waking moment and when he cannot be, the car never escapes his thoughts. He wonders if the Ferrari is thinking about him like he is thinking

about the Ferrari. As Pietz explains of the "irreducible materiality" of the fetish object, the object is kept close to the body, the subject is "touched within the embodied self" by the power of the fetish object, and the boundary between subject and object are blurred (12).

The relationship with the car truly reaches an extreme, even within such an irreverent and experimental novel. Literary critics have analyzed the shocking scenes of masturbation, sex, and religious devotion involving the Ferrari; here, I would like to consider a subtler example of their relationship —the seemingly complete integration of one with the other and of both with the highway. The following selection uses traffic signals and warnings to convey their movement through the streets of San Juan:

Tubería rota, semáforo roto, semáforo intermitente, vigilante electrónico, velocidad comprobada por sistema Vascar, cuesta, termina carretera dividida, reduzca la velocidad, zona escolar, resbala mojado, curva, lomo, detour, hombres trabajando, cruce de peatones, fin del pavimento, carretera en construcción, 25 MPH, confluencia, velocidad máxima cuarenta millas, no entre, no vire a la izquierda, no vire a la derecha, no vire en U, aprendiz al volante, lamentamos los inconvenientes que la Autoridad de Carreteras le ocasiona. (161-162)

Whose perspective is conveyed here? It could be the playful perspective of a teenage boy as he swerves through the streets of San Juan or it could be the perspective of the Ferrari itself.

Without a narrative voice that establishes perspective, Sánchez leaves this up for interpretation. I perceive that the Ferrari, Benny, and the highway have merged together into one organic-inorganic assemblage.

The Ferrari as fetish object fully penetrates Benny's actions, body, and thoughts. The car, then, embodies the spirit *of* matter. As Pels explains:

Not only are humans as material as the material they mold, but humans themselves are molded, through their sensuousness, by the dead matter with which they are surrounded [...] The greed or fancy evoked by the fetish constitutes humans as sensuous, and

therefore suffering, beings, as both subject and object of a historical configuration of desire in which neither humans nor objects possess a predetermined primacy. (101-102)

Despite the fact that Benny never abandons his position of privilege nor becomes receptive to others beyond the assemblage, I still find this merging significant. As Juan Gelpí demonstrates in his analysis of the novel, *La guaracha* is at times contradictory, creating complex webs of meaning rather than a linear narrative. I believe that Benny's permeability in this subject-object relationship is another example of how Luis Rafael Sánchez uses materiality to subvert traditional forms of creating and sharing knowledge, even if it is at odds with other aspects of the selfish and entitled character.

In *La guaracha del Macho Camacho*, I have explored the materiality of infrastructure — and cars by association— as a critique not only of modernization but also of the coloniality of knowledge. *La guaracha* challenges the concept of the rational, autonomous subject by bringing that subject down to the level of the street, where radio towers, condominiums, highways, and cars make their presence felt. As Rubén Ríos Ávila demonstrates in his book chapter titled "Apetitos del goce," *La guaracha* shows us that we can enjoy and we can know simultaneously. In this way, the novel liberates itself from the division between pleasure and the senses, on one hand, and knowledge and rationality, on the other. In the next section, I will analyze the trajectory of another male protagonist as he questions his privilege and undergoes an even more thorough —although less performative— process of deconstruction.

2.3 Electricity and the Drug Trade in Cualquier miércoles soy tuya

Nadie. Nada. No car in the carport means that nobody is home. This is the logic that frustrated writer and self-appointed investigative journalist Julián Castrodad follows as he waits outside of the house of M., wife of missing union lawyer Efraín Soreno and former regular at the Motel Tulán. Julián heads to M.'s house as he wanders the city in search of answers. The protagonist of the 2002 novel by Mayra Santos Febres loosely holds together the multiple narrative threads of this polyphonic novel. His friend, Tadeo Chamdeleau, has been detained for smuggling drugs. Chino Pereira, the drug dealer that hired Tadeo and promised to help him, has disappeared. A citywide blackout has resulted from the strike declared by the *Autoridad de* Energía Eléctrica, and it appears that M.'s husband, accused of corruption and involvement in all of the above, has been murdered, his charred body found on a hill on the outskirts of the city. Julián is unsure what drives him to seek out M. Does he seek closure after the abrupt end to their weekly rendezvous at the motel? Is it possible that M. murdered her corrupt husband? Might she be able to provide information that could help Tadeo? In any case, no car in the driveway means nobody is home so Julián drives off.

As Julián waits outside M.'s house the next day he realizes his faulty logic. A car does not equate to a person. The rupture of the car-for-person metonymy is a significant gesture in the representation of a city marked by gridlock, where the cars, people, and highways could be considered the foundational assemblage of modernization and consumerism under US colonialism. In Santos Febres's San Juan, the causes for the literal and figurative gridlock have shifted yet the sensations persist. Gated communities obstruct movement and a sea of cars seeks air-conditioning at motels near the highway during the blackout caused by the *Autoridad de*

Energía Eléctrica. After making his way into M.'s gated community, Julián breaks the hold of this complex car-for-person metonymy when he realizes that, despite the absence of a car, a golden retriever is being cared for. The simple interdependence between a human and an animal overcomes the unfulfilled promise of interconnectivity through modernization. Julián is able to reconnect with M. and this brief chapter, "Vigilia," marks the denouement of the novel.

In the analysis that follows, I will consider to what extent the effects of modernization persist in this 2002 novel. Electricity is the main form of infrastructure explored in *Cualquier miércoles soy tuya*. Santos Febres represents the impact of a blackout on everyday life, yet I find it even more interesting that she incorporates the people who work for the public utility, the electrical plant and grid, the phenomenological qualities of electricity, and electricity as a metonymy for modernity.

Cualquier miércoles soy tuya has been described as both künstlerroman, or artist's novel, and detective novel, with Julián Castrodad as the previously described frustrated writer and self-appointed investigative journalist (Grau-Lleveria). My analysis will focus on the role of electricity and illicit drugs in his investigation and development as a writer. As a detective novel, Cualquier miércoles focuses on the dubious connections between the Autoridad de Energía Eléctrica and the drug trade and reveals that there are more similarities than differences between the public utility, on the one hand, and the illicit business, on the other. These discoveries uncover not only the injustice and inequality that pervade the city but also reveal to Julián his position of privilege in comparison to his friend Tadeo. Electricity and drugs, marijuana in particular, have phenomenological properties that influence the way in which Julián understands his interactions with others and ultimately lead to what I describe as the beginning of a process

of decolonization for the protagonist. By the end of the novel, the frustrated writer frantically writes, no longer clinging to privilege or the illusion of truth but rather to the promise of intersubjectivity. This slightly optimistic outcome for the protagonist sharply contrasts with the inequality that he uncovers around him.

2.3.1 Modernity/Coloniality

The novel begins on a Wednesday in the morning as Julián reflects on his first shift at Motel Tulán. He begins: "Estacioné el auto, o mejor dicho, la carcacha carcomida por el salitre con la que con tanto esfuerzo me muevo por la ciudad" (Santos Febres 11). As suggested by the title, *Cualquier miércoles soy tuya*, Wednesday plays a significant role in the novel, as it is the night of the encounters between Julián and M. as well as the beginning of the blackout. The nod to *La guaracha* and its never-ending traffic jam on a Wednesday afternoon does not seem casual, and the similarities do not end there. Both novels are populated by cars, highways, obstructions to movement, blackouts, corruption, bombs used as a political message, and social groups marginalized by race and class.

By focusing on many of these factors, Guillermo Irizarry identifies "signs of long-lasting colonialism and capitalist exploitation, and the effect of a forceful process of modernization and industrialization" in the novel (82). In the book chapter "Failed Modernity: San Juan at Night in Mayra Santos Febres's *Cualquier miércoles soy tuya*," he considers marginalized spaces and people, arguing that they are construed as residues of global processes and serve as a negation of the promises of modernity. He sustains that failure also serves as an opening through which one can sense "alternative circuits of communicability within subalternity" (67). I find this analysis

engaging and seek to trace a similar trajectory in this chapter by considering the lasting effects of modernization. I also propose that the affective responses provoked by infrastructure represent an alternative way of knowing and feeling. I believe, however, that the concept of "failed modernity" is a misnomer that does not take into account the inequalities that are inextricably linked to modernity. Instead, I prefer the term disavowed modernity based on Sibylle Fischer's research about the role of the Caribbean in the conception of Western Modernity.

In *Modernity Disavowed: Haiti and the Cultures of Slavery in the Age of Revolution*,

Fischer conveys the urgency of acknowledging the colonial heterogeneity of modernity. Her

object of study is the disavowal of the Haitian Revolution and radical anti-slavery politics at the

turn of the nineteenth century. Fischer relates this paradox to more contemporary debates that

continue to defend modernity and its "utopian promise" as an unfinished project or condemn

modernity as barbaric and irredeemable. Fischer views both of these assessments as Eurocentric

and blind to the contradictions and complexities of modernity. She throws the following shade:

If we do not take into account to what extent modernity is a product of the New World, to what extent the colonial experience *shaped* modernity—in Europe and elsewhere—politically, economically, and aesthetically, and to what extent modernity is a heterogeneous, internally diverse, even contradictory phenomenon that constituted and revolutionized itself in the process of transculturation, then, obviously, talk of modernity is just a re-instantiation of a Eurocentric particularism parading as universalism. (23-24)

Since its constitution, Latin America and the Caribbean have shaped modernity, and modernity has always been contradictory, encapsulating both hope and terror. Fischer recapitulates the conclusion of Theodor Adorno and Max Horkheimer in *The Dialectic of Enlightenment* to note that, "Emancipatory potential and oppressive tendencies are rooted in exactly the same characteristics—the hegemony of instrumental reason and the submission of nature to a

calculating rationality" (Fischer 34). In sum, the unequal modernization within *Cualquier miércoles* does not illustrate the failure of modernity but rather reveals the heterogeneity of modernity, what I refer to as modernity/coloniality throughout this dissertation.

The trajectory of Tadeo Chamdeleau exemplifies the heterogeneity of modernity in Cualquier miércoles soy tuya. Born in Haiti, Tadeo moved from one side of Massacre River to another as a child and then made the precarious crossing by raft from the Dominican Republic to Puerto Rico in search of work. Despite the countless obstacles he encounters, he will do anything to help his family improve their circumstances. For him, this means connecting his mother's house to the electrical grid. Electricity represents the threshold to modernity. It marks material progress and has moral implications as well. Tadeo does not want his family to fight for scraps like dogs. He feels compelled to honor his responsibility of providing for his family and fulfilling his role as an "hombre bueno" (Santos Febres 36). He speaks of the promise of the island, of Puerto Rico, of opportunity, and of money coursing through his veins like a drug. Half of the house has access to electricity ("mitad con luz, mitad con quinqué") when Tadeo runs out of money so he continues to risk his life on a raft and later as a drug mule (Santos Febres 39). Even after he is caught with the drug shipment, deported to the Dominican Republic, and sentenced to a six-year term. Tadeo ends a phone call with Julián by reaffirming his promise: "ya para entonces, y eso lo juro hasta por el hijodeputa de Dios, la casa de Baní va a tener luz en todos los cuartos" (Santos Febres 221).

Tadeo is not immune to the pull of modernity, represented literally and figuratively by access to electricity, and he will do anything to help his family improve their circumstances. He is presented as a victim of his circumstances and, at the same time, Tadeo confesses a dark secret

to Julián after being imprisoned for transporting drugs. During the trip by raft from the Dominican Republic to Puerto Rico, Tadeo protected a woman from the sexual violence of others only to rape her in a fit of rage. For literary scholar Víctor Figueroa, the shocking confession of this "violencia gratuita, radical e injustificable" is key to understanding one of the underlying themes of the novel (452). Without excusing his actions, Figueroa believes that Tadeo's crime and punishment reveal the hypocrisy of the society in which they occur, a society that condemns Tadeo but not the structural violence that drove him to risk his life on the raft in the first place. Figueroa argues that Santos Febres uses the drug trade and Tadeo's crime in order to challenge the binary of legality and illegality and highlight the corruption and violence embedded within socially accepted practices and institutions.

I believe that Tadeo's character develops a profound critique of the values associated with Western modernity. First of all, Tadeo understands his prison sentence as punishment for the violent crime he committed: "Por eso no me quejo de que me hayan atrapado. Quizá esto era lo que tenía que pasar. De alguna manera tenía que pagar. Dios me dio suficiente chance para que arreglara y no pude. Y así es ahora como me llega la cuenta" (221). He does not express guilt for the crime that led to his imprisonment (which could be considered a crime of poverty); instead, he holds himself accountable for a crime that he committed against someone even more vulnerable than himself; a crime that will likely never be prosecuted. Tadeo reveals that concepts like justice and freedom are not applied to everyone in the same way. Before he even makes the decision to accept the risky drug smuggling job, he explains to Julián that he literally has nothing to lose, not even his freedom; he asks, "¿A esto tú le llamas libertad?" (Santos Febres 139).

It does not seem casual that Tadeo is a transitional migrant of Haitian origin. Over two centuries ago, Haiti became the first black Republic in the world and enacted a radical, antiessentialist stance on liberty and racial equality. The Haitian Revolution, and subsequent constitutions, exposed the hypocrisy of the French Revolution that had proclaimed universal rights but excluded women, slaves, and foreigners. Haiti's radically democratic proposal was feared by much of the world and the nation's role in the conception of Western modernity would be disavowed as it suffered crisis after crisis —political, economic, natural— in the face of isolation and neocolonial imperialism. Due to his relentless drive to provide electricity for his family, his precarious position, his violent outburst, and his reflection on justice and freedom, I believe that Tadeo embodies the tension between modernity and coloniality.

2.3.2 Electricity as Metaphor and Materiality

Cultural critic Bill Brown coined the term "Thing Theory" to encapsulate the social meaning and uses of objects as well as their material presence and properties. In his contribution to *Material Powers: Cultural Studies, History, and the Material Turn,* Brown applies this approach to literature, exploring physical and psychological experience of plate glass, shop windows, and elevators in a novel set in Chicago at the end of the nineteenth century ("Matter" 75). This approach to literature combines both attention to materiality and affect, and I find it particularly helpful to analyze an immaterial form of infrastructure like electricity. In this section, I will explore the polysemy of electricity in relation to progress, addiction, consumer society, and corruption. Then, I will focus on its phenomenal specificity in relation to Julián's personal and professional development.

Parallel to Tadeo's modest yet impossible goal of modernizing his mother's house, electricity is portrayed as a basic need for an overwhelming number of anonymous Puerto Ricans in the novel, and they are willing to pay to stay at a motel that has a generator to avoid a night without air-conditioning. In "Drogas y marginalidad" Figueroa equates this *need* for air-conditioning to (drug) addiction, to an insatiable hunger for luxury, and to excessive consumption. The fledging consumer society represented by the Ferrari fetish, advertising jingles, and the construction of megamalls in *La guaracha* has come to fruition in *Cualquier miércoles*, requiring only electricity to convey the pervasiveness of consumerism and persisting inequalities.

As a self-appointed investigative journalist, Julián tries to uncover the truth about the *Autoridad de Energía Eléctrica*. Will the utility be privatized? Will there be a strike? Is the union responsible for the bomb at the Palo Seco plant or was it the work of internal agitators planted by the government to discredit the union? Are union officials siphoning public money? Are they involved in the drug trade? The disappearance of Efraín Soreno, union lawyer and husband to M., provides a convenient scapegoat. The union subsequently claims that in light of the facts (*a la luz de los hechos*) of Soreno's corruption it will be necessary to reevaluate union leadership, but the important thing was that everything had come to light (*todo había salido a relucir*) and negotiations had continued (Santos Febres 278).

The previous quotations reveal that corruption is conveyed in the novel through a powerful juxtaposition of light and darkness. Light is a metaphor commonly used to elaborate the promise of modernity. Reason promises to illuminate the problems of society as well as their solutions. Knowledge, order, and progress will lead to equality and liberty for all. Through the

Autoridad de Energía Eléctrica, Santos Febres elaborates the sensorial inverse of this promise: The stifling heat and desperation of the city-wide blackout is preceded by secretive late-night negotiations in Motel Tulán between union officials, politicians, and drug dealers. Access to electricity is embedded in obscurity, chaos, and corruption.

Julián's first encounter with M. is also marked by the contrast of light and dark. He delivers a bottle of alcohol to her room at Motel Tulán late on a Wednesday night. Her cold fingers brush his skin and the contact shocks him, causing him to jump and almost drop the bottle. She opens the door, framed by the empty light of the room, and Julián makes contact with her dark gaze. Her eyes are so dark that he claims he could lose himself in them. The light touch and gaze snap Julián out of his intentionally mechanical and impersonal actions as a motel employee. "Contacto de pieles, ojos que crearon un puente que ya era difícil hacer estallar": M. and Julián soon begin a brief affair. Later in the novel, the sensual and sensorial memory of this moment will seize his unsuspecting body (Santos Febres 44, 45, 51).

Julián's investigation and his personal trajectory collide when he sees a photograph of M. and Efraín Soreno in the newspaper on the first day of the blackout. The photograph accompanies a story about his disappearance, which only serves to increase suspicions about corruption. Julián, however, finally has proof that Efraín Soreno, the union lawyer involved in the drug trade, is indeed Efraín, the unfaithful husband mentioned in M.'s manuscript. "Aquella foto me electrocutó," he confesses. It is unclear what shocks him more, connecting the loose ends of his investigation or seeing M. weeks after she had stopped showing up to Motel Tulán.

It is worth noting that electricity is a form of immaterial materiality. It is a physical phenomenon—a current or charge—that results from the movement of electrons between atoms.

As negatively charged subatomic particles, electrons are attracted to the positive charge in a neighboring atom. This movement causes positive potential in the following atom, also known as an electron hole, and the balancing act continues along a conductive material (Holton and Sze). This brief scientific explanation is helpful for visualizing how electricity transforms the way Julián understands himself and the world around him. While he recognizes that he used to be "un *brain*," "de los que piensan mucho," Julián begins to question his cerebral approach to knowledge (Santos Febres 107, 206). The electrifying encounters with M. speak to and through Julián's body. He becomes more receptive to being touched, literally and figuratively, by other people. As Julián becomes sensitive to the flow of electricity between two bodies, he is able to let the current pass through him and into his writing.

Literary scholar Rosana Díaz-Zambrana has compared Julián's position and behavior to that of the nineteenth-century *flâneur* who practiced investigatory vagrancy. She describes Julián not as a passive voyeur but rather an active *voyant* that loses himself to the promiscuity of the spaces he explores. For Díaz-Zambrana, his vulnerability is directly related to a new approach to knowledge, truth, and power: "Santos Febres insiste en una deliberada desacralización de lo erudito y del racionalismo como categorías absolutas de verdad que al final de cuentas, consiga movilizar los márgenes y promover una participación más equitativa o revolucionaria del poder" (Díaz-Zambrana 125). Building upon her observations, I sustain that the phenomenal specificity of electricity structures Julián's process in a way that questions the primacy of reason as well as the mind/body divide of the Cartesian subject.

2.3.3 Organized Crime and Vulnerability

Several unexpected associations can be made between electricity and illicit drugs.

Curiously, one of the ways to trigger an electrical current is called *doping the holes*. It involves doping a conductor with another element to create a surplus of positive charge, also known as an electron hole. In this way, marijuana consumption triggers an increased vulnerability that Julián describes once again as the flow of electricity between two bodies. Similar to electricity, I argue that the role of illicit drugs in the novel can be understood through both affective responses to drug consumption and the drug trade as a social structure. Drug trafficking can be analyzed in relation to modernity/coloniality, addiction and consumption, and the logic of neoliberal globalization.

The drug trade and the *Autoridad de Energía Eléctrica* unexpectedly mirror one another as forms of infrastructure. In "Drogas y marginalidad," Figueroa explores the calculating rationality that structures legal and illegal spaces alike, concluding that there is little difference between public and private, licit and illicit. Public officials are revealed as corrupt and drug lords are shown to be philanthropic. Chino Pereira, along with his boss and uncle the legendary Sambuca, uses the drug trade to provide opportunities for communities marginalized in the name of modernization. At the same time, however, Chino Pereira approaches the commodity he distributes with instrumental reason: Anyone that becomes addicted has a weak mind. For Figueroa, Chino Pereira depends on the mind/body divide of the autonomous Cartesian subject to justify his actions and avoid responsibility for any negative consequences his product may have (453). These contradictions are attributed to the exclusionary violence of global capitalism rooted, in Puerto Rico, to a specific history of colonialism and modernization.

The drug trade in *Cualquier miércoles soy tuya* is not idealized but rather shown to be ambivalent and contradictory. Figueroa explains that Santos Febres avoids a moralistic condemnation of drug circulation and consumption in order to represent drugs as a commodity in a global market driven by profit and supported by exploitation. He considers this a refreshingly lucid vision of drug consumption. Along these lines, without condemning or idealizing drug consumption, I will also consider the role intoxication plays in relation to vulnerability, through the concept of *doping the holes*.

During one of his shifts at the Motel Tulán, Julián is invited to accompany El Chino Pereira for a morning smoke as others package drugs. Julián describes in detail the physical and psychological effects the marijuana has on him: "Yo fumé, primero, con un poco de nervios; después, la María comenzó a hacer sus efectos. Una corriente suave de electricidad me cruzaba de banda a banda. Mi cara sonreía pasivamente y los ojos, los malditos ojos, fueron a posarse de nuevo en el semblante de Chino Pereira" (Santos Febres 104, emphasis added). Similar to his experience with M., Julián inadvertently gazes into the face and penetrating eyes of the drug dealer. It seems no small coincidence that the metaphor of an electrical current is used to describe Julián's affective response to marijuana. The drug not only has the physical effect of a shock but it also facilitates physical and psychological intimacy: "aquella cercanía, aquella corriente extraña y extrañísima conexión era culpa de la marijuana" (107).

During this intoxicated exchange Julián feels vulnerable, like "un ente vulnerable, delicado" (Santos Febres 105). Chino Pereira's eyes penetrate him, his smile makes him blush, and Julián imagines sexual exchanges between the two. Julián suggests that controlled substances in general, even cigarettes and alcohol, are merely a pretext for vulnerability,

particularly between men. The effect of these controlled substances is to numb one's will in a way that allows for vulnerability. In other words, authority or responsibility is taken away from the mind and space is given to the body. Julián has become receptive to contact with another individual experienced primarily through sensation.

The affective response to both electricity and drugs could be summarized in the concept of *el roce*. The term is used to described Julián's encounters with both M. and Chino Pereira as well as his relationship to writing. The translation of *roce* encapsulates physical interaction—a graze, a brush, even friction with another being—as well as an interpersonal connection or bond. It is in this double gesture of physical vulnerability and non-possessive relation that I see Julián's decolonization. This approach to relation is not limited to sexualized encounters with other bodies, but rather articulates an intellectual position that will be explored in the final section of this chapter.

2.3.4 Becoming Other

As the narrative threads unravel, Julián is without a job, a story to expose, a novel to publish, or a romance. He is left with only the traces of his encounters with others: "el roce de un abandono, el roce de un cuerpo de mujer misteriosa, el roce de las palabras de Tadeo todavía retumbándome en los oídos y el roce de la corriente maleva que me provoca el Chino Pereira" (Santos Febres 228). These traces left by touch, sound, and gaze lead Julián to break out of his writer's block and rethink the practice of writing. The paper becomes a throbbing body over which he glides, and the electricity of the light touch of another person is transferred to his fingers as they move across the keyboard (Santos Febres 273). To write is no longer to search for

truth or to assume the responsibility of transmitting knowledge but rather a sensual experience and the hope of connecting with a reader.

This conceptualization of the body as it interacts with other bodies and objects, marked by the blurring of boundaries and waves of sensation, is reminiscent of the concept of the Body without Organs developed by French philosophers Gilles Deleuze and Félix Guattari, a major influence for many scholars of affect theory. Deleuze and Guattari suggest that by deterritorializing the body, by decoupling the function and ascribed meaning of each body part, the body can become a surface through which intensities and waves can flow. In this way, they call the Body without Organs the "field of immanence of desire" (154). The shift in tone in the final pages of the novel, to a more abstract and poetic stream-of-consciousness, makes more sense if considered through this approach to the body:

Ser otro en la ausencia del yo que busca, perder el motivo de la búsqueda en el trazo del roce y [...] de tan perdido, perder la distancia entre lo buscado y el que busca. Que la distancia entera fuera lo único existente, uno diluido en ella, siendo parte de ella, su cuerpo, las partículas del cuerpo del deseo. (Santos Febres 261)

After opening himself to electrifying encounters with others, Julián begins the never-ending process of becoming a Body without Organs. He becomes less cerebral and his body becomes more receptive to the sensuous materiality of his surroundings. This process is carried to its "logical" conclusion toward the end of the novel. After Julián describes his new approach to writing, he imagines himself placing his head at the feet of all those who have touched him so that they might eat it. He makes this offering to M., Tadeo, El Chino, and even to the papers of his manuscript (Santos Febres 262). This act bears a striking resemblance to the deterritorialization of the Body without Organs and represents part of a process of decolonization

for the privileged male protagonist. Offering his decapitated head is a critique of the faith in knowledge and truth that defined Julián at the beginning of the novel. He continues to enjoy many privileges. He is able to regain his job at the newspaper and perform it from his newly enlightened position while those who had touched him along the way are in hiding, in prison, or deceased. Still, however, Santos Febres gestures toward a knowledge that decenters the rational subject through Julián's personal and professional development.

The novel closes with the line "aquí, entre estas páginas, palpita la promesa" (Santos Febres 280). What is the promise? Julián writes with the hope of finding a reader —a pair of eyes — yet will not even go so far as to suggest that his papers will offer any sort of shelter or stable ground. In a word, the promise is the *roce*: the graze, the brush, the light touch, and the bond. The *roce* becomes an intellectual gesture and an aesthetic that suggests a different way of knowing, or rather of not-knowing.

2.4 Unpayable Debt in "Hay una deuda" and Puerto Ricans Underwater

On June 30, 2016, President Barack Obama signed the Puerto Rico Oversight,

Management, and Economic Stability Act into law. The bipartisan measure, also known as

PROMESA, aims to address the Puerto Rican debt crisis. PROMESA provides no funds but
rather establishes an autonomous Fiscal Control Board to manage the debt. Appointed by the US
president, the Fiscal Control Board, also known as *La Junta*, has the authority to establish an
annual budget for Puerto Rico, make cuts to public services, increase taxes, and change labor
laws. The acronym, PROMESA, is the noun for promise in Spanish, yet it is not clear who is
promising what to whom. Is US Congress suggesting that the bill will bring relief for the Puerto

Rican people? Or that it will guarantee repayment to the creditors? Can PROMESA be understood as a repetition of Operation Bootstrap? A consequence? Or both?

Although Operation Bootstrap has involved significant tax exemptions for foreign businesses since 1948, it was in 1976, the same year as the publication of La guaracha del Macho Camacho, that Section 936 of the US tax code established total tax exemptions for US businesses with subsidiaries on the island. These exemptions enticed petrochemical and pharmaceutical companies to open factories on the island, and it was suggested that the higherpaying manufacturing jobs in these industries would strengthen the local economy. Nevertheless, when the tax break was fully phased out in 2006, many companies closed their factories and left the island. It became clear that Section 936 had primarily benefitted US businesses. Amidst the recession that followed, municipal bonds propped up public spending and services. These tripletax exempt bonds remained attractive to investors despite the growing economic crisis. In fact, in the years leading up to PROMESA, hedge funds and the more speculative "vulture" funds bought a significant portion of the \$72 billion debt. In June 2015, Governor Alejandro García Padilla announced that Puerto Rico would be unable to pay its \$72 billion debt without cutting essential services. Puerto Rican bonds were then downgraded to "junk status," further exacerbating the crisis.

The following year, two US Supreme Court rulings would pave the way for the US government to intervene by prohibiting Puerto Rico from taking action to manage the debt.

Puerto Rico v. Sanchez Valle denied Puerto Rico the sovereignty to try criminals according to local laws, as is afforded to US states and tribal lands. In his dissenting opinion, Justice Breyer cited a memorandum from the United States to the United Nations claiming that Puerto Rico had

achieved the "full measure of self-government" (*Puerto Rico v. Sanchez Valle* 10). In other words, the decision treats Puerto Rico as a colony despite the fact that the US has claimed since 1952 that Puerto Rico is no longer a colony so that it could avoid making regular reports to the UN on Puerto Rico's "economic, social, and educational conditions" (*ibid.*). Days later, in *Puerto Rico v. Franklin California Tax-Free Trust*, the court ruled on behalf of mutual funds and hedge funds that were trying to prevent Puerto Rican utilities from declaring bankruptcy. Again, the dissenting opinion was quite telling. Justice Sotomayor claimed that the court was denying Puerto Rico the only existing legal option for restructuring its debt.¹⁵

These rulings were baffling, even illogical, as the dissenting opinions demonstrate. They become legible, however, if we consider them through the lens of modernity/coloniality. The Global North speaks and acts on behalf of universal values, such as freedom and justice, while paradoxically denying those rights to entire populations and profiting from it. In "Accumulation, Dispossession, and Debt: The Racial Logic of Global Capitalism," media theorist Paula Chakravartty and critical race theorist Denise Ferreira da Silva explore the "incomprehensible (moral) obligation and unpayable (monetary) debt" that are placed on certain populations (370). They explain that financial institutions extract profits from people and places deemed to be "unsuitable economic subjects" (365). In other words, they earn higher profits by betting against "high-risk" borrowers. Despite this intentionally predatory lending, it is the economically dispossessed that must carry the financial and moral responsibility of debt.

¹⁵ In her dissenting opinion for the decision, Justice Sotomayor exposes the absurdity of the decision that ruled that Puerto Rico's Economic Recovery Act of 2014 is prohibited by Chapter 9 of the bankruptcy code. Chapter 9 lays out a bankruptcy process available to US states, their cities, municipalities, and public utilities and, at the same, prohibits states from creating their own bankruptcy processes. Although Puerto Rico cannot take part in the bankruptcy processes set forth in Chapter 9, the court ruled that Puerto Rico and its municipalities were bound by the rest of the document.

The Puerto Rican debt is unpayable on many levels, not only in the practical sense of over \$20,000 of national debt per capita, but also in a more profound sense. Chakravartty and Ferreira da Silva explore how coloniality produces a debt that "cannot be settled even with death" (365). In this way, debt can be understood as the lack (of religion, of civilization, of modernization, of democracy) strategically assigned to certain places and persons over the centuries to justify exploitation and expropriation. It is inextricably linked to the history of conquest and colonization in the Caribbean region. In fact, Nobel laureate Joseph E. Stiglitz argued that colonialism is the real debt that must be repaid in a 2015 op-ed titled "What the United States Owes Puerto Rico."

Debt is a promise, a promise of repayment, a detail that further complicates the ambiguity of the acronym PROMESA. Who borrowed from whom? Who promised repayment? Under what conditions? One would think that this would be the most urgent question. Nevertheless, the Fiscal Control Board has refused to allow a civic audit of the debt, despite suspicion of corruption and the fact that hedge and vulture funds swooped in to purchase "high-risk" bonds as the crisis deepened. Thus, PROMESA unabashedly disavows the questionable circumstances and intentions that lead to the unpayable debt.

While US Congress, the US Supreme Court, the Fiscal Control Board, and the Governor of Puerto Rico gloss over the details of Puerto Rico's debt and political status, artists are giving form to these disavowals through performance. On June 30, 2016, the same day that President Obama signed PROMESA into law, a collective of artists held a funeral service for the *Estado Libre Asociado* at the steps of the capitol building in San Juan. A chronicle of the event recounts: "Cuando llegó el coche fúnebre, no había ataúd, ni cuerpo, ni muerto. Es imposible que muera lo

que nunca existió y sin embargo allí estábamos, presenciando la muerte de lo que no fue ni Estado, ni libre, ni asociado, ni nada" (Estrada López). The event was called the Cena Negra, because it was both a funeral and a parody of the exclusive Dîner en Blanc hosted the month before, an invitation-only gala in a highly visible public space for which attendees were expected to dress in white, bring a white table, white chairs, a white table cloth, and their own picnic. The exclusive event was understood as an attempt to deny the existence of the economic crisis facing the island. It is within this context of a funeral/celebration/parody/protest on the steps of the capitol on the day PROMESA was signed into law that Mara Pastor recited her poem "Hay una deuda."

2.4.1 There Is a Debt But It Is Broken

Hay una deuda pero está rota y es inútil pagarla en pedacitos. -Mara Pastor, El libro de la promesa

The opening verse of the poem encapsulates the preceding discussion of coloniality and unpayable debt. In the most literal sense, the broken debt suggests the default on the \$72 million debt. The inability to pay and the demotion of Puerto Rican bonds to "junk status" signals a breakdown in the flow of production, circulation, and consumption, similar to the traffic jams and blackouts of the previous sections. As part of the financial infrastructure, debt is broken because it is literally unpayable.

The concept of broken debt also assumes a figurative meaning related to the coloniality of unpayable debt explored by Chakravartty and Ferreira da Silva. The use of the verb *hay* in the

opening verse and throughout the poem exposes the lack of transparency surrounding the debt and the complex colonial history of Puerto Rico. The verses that follow make indirect allusions to the history of Spanish and US colonialism on the island. "Hay un rey / pero está mal escrito / y es inútil **decirlo** rey" references a 2015 visit to Puerto Rico by the King of Spain. During the King's televised intervention at *El Congreso de la Lengua Española*, his title appeared on the screen as "SU MAGESTAD EL REY DE ESPAÑA" before it was quickly changed to the current usage, *majestad*. The slip is not just a simple misspelling; on the contrary, it was common usage during the era of Spanish colonialism, dating as far back as the sixteenth century.

In a later verse, another nod to Spanish colonialism is made through the mention of windmills:

Habían visto molinos de viento que no funcionan en Santa Isabel de donde se fueron los gigantes con g, y los galenos con g, y los gobernantes con g, y los gallegos con g.

Through the image of the windmill, Pastor conveys the complex web of colonialism that weighs on Puerto Rico to this day. She implicates European colonialism through subtle references to *El Quijote*, and to Spanish immigration and rule. At the same time, she names a specific infrastructural project that involves a more subtle form of twenty-first colonialism. Pattern Energy, a California-based company, received a \$200 million contract from the *Autoridad de Energía Eléctrica* (AEE) to build and maintain the Santa Isabel Wind Farm. Since the wind farm became operational in 2013, it has failed to produce the energy promised. Despite using

innovative technology, the wind farm was implemented poorly, in an area with low winds, at great cost to the AEE and great profit to a transnational US-based company. Public utilities hold a significant portion of the \$72 billion debt and have been accused of questionable contracts. Thus, the wind farm (as an example of dysfunctional infrastructure) has directly contributed to the unpayable debt (also a form of broken-down infrastructure).

2.4.2 There Is a Song But It Is Broken

"Hay una deuda" is not directed to an international audience but rather to the contemporary protest movement on the island. First presented at the *Cena negra*, the poem was later published in *El libro de la promesa*, an anthology of poems expressing opposition to PROMESA. The anthology was intentionally priced at \$4.25, the minimum wage for youth under 25 set by the Fiscal Control Board in order to encourage companies to do business on the island. These paratextual details underscore the intended audience of indignant and politically engaged youth.

The importance of solidarity is underscored by intertextual references to a poem by José María Lima. Lima was part of the prolific, experimental, and politicized *Generación del sesenta*, whose most notable writers include the very same Luis Rafael Sánchez. In the 1960s, Lima was persecuted for his political beliefs and connections with Cuba, and he was later isolated due to mental illness. He now serves as inspiration for the current generation of politicized poets.

Despite the fact that his poems were marked by tragedy and disillusion, literary critic Aurea María Sotomayor explains there is no other process for him besides "el de la esperanza, el del deseo cumplido, el de la espera de que el deseo se cumpla" (172). Sotomayor suggests that

Lima's collection *La sílaba en la piel* published in 1982 and, in particular, the poem "hay un río de claridades acentuadas" illustrate this paradox. It is the most hopeful yet defeated verse of this poem that is referenced by Mara Pastor in "Hay una deuda." An excerpt from Lima's poem appears on the left and the poem by Pastor on the right:

hay una *canción*pero está rota

y es inútil *decir*la en pedacitos.

Hay una *deuda*pero está rota

y es inútil *pagar*la en pedacitos.

The opening verse of "Hay una deuda" can be considered an homage to Lima. Both poems lament exploitation and call for change. A closer look at the intertextuality, however, and specifically the use of the verb *hay*, reflects the subtle yet meaningful shifts in regard to solidarity and exploitation between 1982 and 2016.

Throughout "hay un río de claridades acentuadas," hay+indefinite article is used to enumerate the exploitation of resources and consequent suffering in general terms. The maritime images (sea, shore, boats, fish, sirens, rowers, salt, beaches) suggest an island; thus, the poem could resonate within a broader context of coloniality within the Caribbean. Pastor, on the other hand, reiterates the full verse ("hay una canción / pero está rota / y es inútil decirla") with variations, all of which refer to the particular colonial history of Puerto Rico. The debt is broken, magestad is poorly written, the king is in pieces, and the language is in debt. Through allusions to current events, such as the visit by the King of Spain and the unproductive wind farm, Pastor focuses on Puerto Rico and the current debt crisis.

The most significant shift in tone between the poems occurs halfway through "Hay una deuda" when the poetic voice shifts from the impersonal *hay* to the first person *tengo*. The phrase becomes more urgent and direct as the verse becomes shorter: "Tengo una deuda / está rota / y es

inútil pagarla." Now it is the individual citizens of Puerto Rico that are feeling the burden of the national debt through austerity measures, such as budget cuts to education, pensions, health care, transportation, and labor protections. The personal assumption of the debt makes it possible for the poet to declare the debt unpayable:

```
No tengo
1
2
3
4
5
6 pelícanos,
pero los debo.
No tengo 1
2
3 niñas,
pero las debo. No tengo
1
2
3
4
5 islotes, pero los debo.
```

It is as if the poet turns her pockets inside out to show that she does not have the resources to pay the national debt. The curious choice of pelicans, children, and islets resonates with Lima's use of natural resources and a newborn to represent exploitation. At the same time, the word choice underscores the tension between the (national) debt and the (individual) citizen. Although the burden of debt has been placed upon the Puerto Rican people, Pastor illustrates that it is unpayable through an account of what is owed but not owned by the poetic voice.

2.4.3 Drowning in Debt

The personal assumption of unpayable debt is an underlying theme of the ongoing portrait series *Puerto Ricans Underwater* by photographer Adál Maldonado. The portraits are taken from above and capture the subject submerged in a bathtub full of water. The project began with Maldonado's circle of friends, mostly performers and artists, and has now expanded to include strangers that have learned about the project through word-of-mouth or social media. Maldonado acknowledges that everyone approaches the crisis differently and therefore he allows the participants to pose however they would like. Some use the opportunity to denounce *La Junta*, Monsanto, or the US government. Others dress in elaborate costumes, going for laughs or glamour. The portrait of Mara Pastor, author of "Hay una deuda," is ethereal. She poses peacefully with her eyes closed. A sheer wet sleeveless top clings to her body and colorful flowers float on the surface of the still water above her as she evokes the death of Ophelia. Is it innocence, desperation, or the ensuing madness that drew the poet to this figure?

Most of the portraits of *Puerto Ricans Underwater* include bubbles, splashes, movement, or even violent trashing. Pastor's portrait is notable for its motionless water. She, more than other subjects, conceals the masochism involved in allowing the water to enter your nostrils, albeit for a moment. The water in Pastor's portrait is so still it is barely noticeable, and the death-like tranquility of her pose becomes even eerier if the viewer imagines the struggle that ensued against her own body to achieve that facade of tranquility under undisturbed water. Pastor looks as if she had already died and it likely felt as if she was drowning, yet viewer, photographer, and subject know that it is staged.

The notion of simulated drowning brings to mind the questionable CIA interrogation techniques of the Bush-era War on Terror, of which waterboarding would become the most emblematic form of disavowed torture. The US government took advantage of grey areas within international peace treaties, arguing that prisoners at Guantánamo were not protected by the Geneva convention and, at the same time, that waterboarding is not a form of torture "because it does not rend the flesh" (Medovoi 26). It was revealed through subsequent investigations and trials, however, that waterboarding effectively simulates death and causes extreme psychological anguish. In response to the nuances of the waterboarding scandal, former Greek Finance Minister Yanis Varoufakis has explicitly compared waterboarding to the imposition of neoliberal austerity measures and debt restructuring. He sees similarities not only in the disavowed suffering but also in the evasion of responsibility through legal and semantic loopholes. In this way, *Puerto Ricans Underwater* conjures up an image of the disavowed economic violence of PROMESA.

Aqueous imagery has long been used to evoke the political, economic, and social issues facing Puerto Rico. As I explored at the beginning of this chapter, Antonio S. Pedreira uses multiple water-related metaphors in *Insularismo: Ensayos de interpretación puertorriqueña*. The 1934 essay and the twenty-first century portrait series represent markedly different approaches to knowledge, authority, and community. Pedreira blames island geography, a backwards mentality, and a lack of leadership (represented as a ship with no one at the helm) as the factors delaying Puerto Rico's development as a nation. In other words, the problem lies with Puerto Rico itself, not with any external circumstances. Pedreira's approach is paternalistic and elitist; he puts his faith in the possibility that educated, young men would follow the guidance of an enlightened *catedrático* like himself. *Puerto Ricans Underwater*; in contrast, recognizes the external factors

that have created a suffocating present. While the underwater pose makes it clear the voice of the Puerto Rican people has been stolen or silenced, Maldonado invites his subjects to make a visual statement. The project is open to anyone who would like to participate and each subject is able to craft their own message by choosing their pose and props. ¹⁶ In this way, *Puerto Ricans Underwater* creates a decentralized critique of the diverse ways in which the crisis manifests itself in everyday life. Much like Luis Rafael Sánchez uses a traffic jam to explore multiple perspectives, photographer Adál Maldonado has created a polyphonic work around the visual metaphor of drowning in debt.

Debt as infrastructure —both as consequence and continuation of modernization under Operation Bootstrap— is frustrating, overwhelming, and stifling. As inescapable burden in "Hay una deuda" and simulated torture in *Puerto Ricans Underwater*, debt immobilizes the poetic or photographic subject, pervades the atmosphere, and denies relief. Even more so than in the previous sections, the subject and the body seem to have no option left but to be receptive to the materiality of crushing debt. Above all, I believe that the radical nature of these two works lies in the way that they explore the weight of colonialism on the individual while also framing the individual as part of a collective. The individual burden is articulated in or, more accurately, toward solidarity with other individual burdens. In "Hay una deuda" by Mara Pastor, this occurs through intertextual references and the use of both the impersonal *hay* and the first person *tengo*. In *Puerto Ricans Underwater*, Adál Maldonado achieves this effect through the repetition of the

¹⁶ Art historian Mercedes Trelles describes this approach as collaborative in nature and linked to social media, since Maldonado always shares his work on Instagram and Facebook. Under the title "Muerto Rico," she examines three recent portrait series by Maldonado that employ a similar methodology to document the impact of crisis on everyday life. In addition to the underwater poses explored in this chapter, there is a series of jumping poses and another of sleeping poses. See Trelles 2018.

disconcerting bathtub pose with slight variations to account for the perspective of each participant.

2.5 In the Impasse

Infrastructure in Puerto Rico is inextricably linked to modernity and coloniality. This combination results in a paradox, in which promises of future-oriented improvement are touted as beneficial for all while the very same promises are based upon the exclusion and exploitation of entire populations and geographic areas. Such a paradox has made it possible for modernization efforts in Puerto Rico to be presented as an economic miracle while foreign businesses and Puerto Rican elites benefitted from urban export-based industrialization and the city was paralyzed by overpopulation, inadequate infrastructure, and growing inequality. This paradox also made it possible for PROMESA to be passed as debt relief despite the fact that it prioritizes predatory lenders over the Puerto Rican people. A certain approach to knowledge, that of the rational subject who articulates his perspective as universal and superior, makes these paradoxical situations seem logical and natural. By focusing on the materiality of infrastructure and the affective responses provoked by it, this chapter challenges the hegemony of the "zeropoint" detached perspective. This approach uncovers the complex relationship between discourse and reality, conveyed as a disorienting sway between momentum and impasse.

What is possible in the impasse? On one level, nothing, as the concept tragically suggests. On another level, the affective responses to inadequate infrastructure have entailed increased vulnerability, an opening of the subject toward their surroundings. A progression can be noted from the spoiled and egocentric Benny that loses himself to his Ferrari in *La guaracha*

del Macho Camacho, to the protagonist of Cualquier miércoles soy tuya that becomes aware of his privilege and more receptive to those around him in. Finally, the poetic and photographic subjects of "Hay una deuda" and Puerto Ricans Underwater bear the burden of unpayable debt in solidarity with other individuals that do the same. I believe that it is nearly impossible to decolonize power or knowledge without more radically breaking with hegemonic cultural forms, yet I have highlighted the subtle ways in which I believe these authors and artists gesture toward such a process.

3. The Ghost in the Machine:

Caribbean Futurism and IT Infrastructure

In an interview published shortly after her second novel, *Midnight Robber*, Nalo

Hopkinson explains that Greek and Roman myth and language has influenced the naming of
technological innovations in the West for centuries: the *Apollo* rockets, *telephones*, *cyborgs*...

Since these linguistic and cultural markers shape the technology we create, Hopkinson wonders
"what technologies a largely African diasporic culture might build, what stories its people might
tell itself about technology" ("Conversation"). Accordingly, her novel *Midnight Robber*,
published in the year 2000, imagines a utopia set in space and managed by a personified
surveillance system known as Granny Nanny. Named after a revolutionary maroon leader,
Granny Nanny is an omniscient yet benevolent sentient interface that guides and protects her
pan-Caribbean community. The network users interact with Granny Nanny through their eshu,
"the operating system that runs a dwelling [...] named after the West African deity who can be in
all places at once, who is the ghost in the machine" (Hopkinson, "Conversation").

The phrase "ghost in the machine" was coined by British philosopher Gilbert Ryle in his 1949 critique of the Cartesian mind-body divide. Curiously, a phrase that began as a dismissal of the concept of disembodied consciousness gained a second life at the end of the twentieth century as shorthand for machine- or network-based artificial intelligence. It is likely this second use that Hopkinson references in her discussion of the personified operating system within *Midnight Robber*. Finally, the phrase would undergo another transformation as the twenty-first century advanced. In his contribution to the volume *Afrofuturism 2.0*, Ricardo Guthrie proposes that race has become yet "another 'ghost' in the machine," since science fiction continues to

"unwittingly replicate hierarchies and subsume racial problematics" (47). In this chapter, all three of these interpretations will serve as the context for an analysis of the relationship between race, place, and information technology (IT) infrastructure in two contemporary dystopian novels, *Habana underguater* by Cuban author Erick Mota and *Midnight Robber* by Jamaican-born author Nalo Hopkinson.

3.1 A Placeless, Raceless, Bodiless Future

Each connotation of the term "ghost in the machine" provides a different lens through which to consider these novels. For example, the philosopher who coined the term argues that it is neither necessary nor productive to impose categories like Idealism and Materialism or mind and body. This critique of Cartesian dualism would later be reflected in concepts like embodiment and situated knowledge, and it is at the core of the material turn that took hold in the 1990s. According to the editors of the anthology *Material Powers: Cultural Studies, History and the Material Turn,* the point of departure for this new materialism is the "entanglement" of the human and nonhuman, the material and the cultural (Joyce and Bennett 4, 8). Through this first lens, I will unpack the relationship between IT infrastructure, the human characters that use it, and the nonhuman characters that inhabit it. Specifically, I analyze the embodied experience of cyberspace and the social meaning of different forms of information technology (networks, quantum computing, and artificial intelligence).

Hopkinson, in turn, finds potential in the disembodied consciousness of machine thinking. Her fictional "ghost in the machine" is a virtual assistant named after a West African deity. Eshu, also known as Legba or Eleggua, is a trickster deity, the god of the crossroads, a

messenger between humans and gods. In *Midnight Robber*; he serves to connect the sentient network with its users and plays an important role in the plot. Similarly, in *Habana underguater*; it is a virtual Orisha, Ochosi, god of the hunt, the persecuted, and justice, who triggers the denouement of the novel when he persuades a sentient firewall to have mercy on the human protagonist. In Mota's novel, cyberspace serves as home for a pantheon of Afro-Caribbean deities who must coexist with self-aware AI-programs, hackers, and Taino gods and mythical creatures that find their way onto the network. These unconventional characters challenge the idea that science and religion are mutually exclusive categories, and they intervene in the plot in unexpected ways, provoking ethical and existential reflections in the human characters.

Finally, literary scholar Ricardo Guthrie argues that the *real* "ghost in the machine" is the enduring legacy of racism, suggesting that technology alone does not make for a more just future. Along these lines, sociologist Alondra Nelson has affirmed that the "promise of a placeless, raceless, bodiless near future enabled by technological progress" was one of the founding myths of the digital boom of the 1990s (Nelson 1). For both scholars, Afrofuturism is a means of recovering the future from the linear trajectory of a progress that has been flaunted as universal yet built on inequalities. For the present analysis, this entails examining how Western discourses of science and technology are used to colonize and dehumanize, recovering the value of African and indigenous approaches to knowledge, and exploring the ways in which colonial power structures are reproduced through information technology.

Through these different lenses, I seek to answer several questions. How does IT infrastructure make itself felt within *Midnight Robber* and *Habana underguater*? How do these texts explore the utopian and dystopian qualities of networks, quantum computing, and artificial

intelligence? How does technology reinforce colonial hierarchies and how does it make space for liberation? Finally, what is the relationship between Afrofuturism, utopia, and dystopia within the Caribbean context? Before moving onto the novels, I will briefly define some of the key concepts embedded within these questions; specifically, 1) the intersection of science/religion/technology/magic in the Caribbean context; 2) Afrofuturism; 3) utopia and dystopia; 4) and IT infrastructure.

3.1.1 Science, Religion, Technology, and Magic

In his book chapter on literary representations of Haitian Vodou, Nigerian scholar Adélékè Adéèkó explores the overlap between science, technology, religion, and magic. Yoruba traditional thought, he explains, is "normally assumed to be 'unscientific'" and is therefore dismissed as magic (112). Adéèkó challenges this interpretation by laying out the motives and mechanisms of the magical within the African context. Just like science, magic has established conventions; just like a mechanical prosthesis, it extends one's capabilities and range of action. He cites philosopher Sodipo to explain: "Magic consists of socially standardized words, gestures, and procedures that man resorts to when, *having faithfully followed his technological processes*, he is left in doubt about the outcome of his efforts, when, that is, there is a gap between the point at which technology has taken him and the result that he desires" (qtd. in Adéèkó 112).

Bringing this information into the Afro-Caribbean context, Adéèkó's essay focuses on how Mackandal, a revolutionary figure in the events leading up to the Haitian Revolution, is perceived within *El reino de este mundo* by Alejo Carpentier. Adéèkó describes Mackandal as a self-taught scientist who undertook a systematic study of plants marked by observation,

experimentation, testing, selection and crossbreeding in order to produce and distribute a plant-based poison amongst the enslaved populations on the island (104). Mackandal also develops shapeshifting abilities that allow him to defy execution, even when he is tied to a burning stake. Adéèkó drives home the point that, "[s]o far as they extend the realm of possibilities or, to use Carpentier's phrasing, amplify the scale and categories of reality, both realistic poison making and mysterious lycanthropy are equally marvelous" (116). To the enslaved Africans seeking freedom, both skills represent a mechanism for making life less random.

Adéèkó goes on to analyze a rousing speech delivered by another historical figure within Carpentier's novel. By invoking the support of the "Great Loas of Africa," rebel leader Bouckman unites the spirits of the two shores of the Atlantic, effectively healing the "division of being" felt by the enslaved Haitians, and achieving their allegiance to the cause of revolution (Adéèkó 118). Bouckman's magical sway over the crowd achieves a spiritual communion that later manifests itself in the material world through rebellion. Adéèkó attributes the success of both Bouckman and Mackandal to a specific way of perceiving the world; he explains, "The slaves do believe that all the events that could be termed 'marvelous' in the story are literally true, and they also know that nothing, even when literal, stands for itself" (118). In stark contrast to the "either/or" perspective that separates science and technology from religion or magic, this approach acknowledges multiple layers of meaning.

The differences between these epistemologies may seem subtle but they would have farreaching consequences for the region and, above all, for Afro-Caribbean populations. European colonizers feared and persecuted West African traditional knowledge and religious practices and, at the same time, the Caribbean became an object of study central to the advancement of Western science. European naturalists would elaborate classification systems that included not only flora and fauna, but also human beings, going so far as to document in great detail the alleged differences between races. In this sense, the European approach to science delegitimized Afro-Caribbean ways of both being and knowing.

3.1.2 Afrofuturism

Jumping forward to the 1990s, the digital revolution merely reiterated colonial hierarchies. In her introduction to a special issue of *Social Text* dedicated to Afrofuturism, Alondra Nelson notes that despite the perceived democratizing potential of information technology, the West was still associated with a high-tech future and the African diaspora relegated to a primitive past (4-6). For Nelson, the Afrofuturist project seeks to combat this misconception by examining "what was *and* what if"; in other words, by examining how Western science and technology has been used to oppress black populations, by challenging traditional notions of science and technology, recovering black inventors and inventions, and imagining high-tech futures for the African diaspora.

Literary scholar Kelly Baker Josephs was the first to formally explore what the "Afrofuturist aesthetic adds to literary and academic models of examining and representing the Caribbean" (124). To carry out her analysis of the Jamaican novel *The Rainmaker's Mistake* (2007), Baker Josephs uses the concept of Caribbean cosmology as developed by Barbadian scholar and poet Kamau Braithwaite. The cosmology includes identifying Afro-Caribbean sounds and words, forms of celebration and worship, forms of warfare and defense, arts of healing, and rites of passage. The two categories most suited for literary analysis are *ananse*, the

"creation and survival of song and story," such as the Anansi/trickster storytelling tradition, and nam, the "central spirit or 'indestructible kernel of the culture" (124). Baker Josephs argues that even when Caribbean authors are incorporated into Afrofuturism, these aspects of their work are overlooked. She concludes that, "rather than pretend that Afrofuturism has already achieved its potential of addressing 'both national and global cultural fronts,' one might directly push against its US partiality" (130).

On a related note, South African artist Pamela Phatsimo Sunstrum argues that US-based Afrofuturism does not encompass the major concerns of the African continent, most notably postcolonialism and neocolonialism. She proposes African futurism as an aesthetic and analytical tool for unpacking and ultimately transcending these historical, political, economic, and geographic "specifiers" (114). The same argument could be made for the Caribbean, a region where the fight for independence continued until the late twentieth century, and where full sovereignty never arrived for some nations. Informed by Sunstrum's attention to colonialism, Baker Josephs's emphasis on Caribbean cosmology, and Nelson's focus on technology as a tool of oppression and liberation, I propose the concept of Caribbean futurism as a working category for this chapter.

3.1.3 Utopia and Dystopia

It is essential to go beyond the facile definition of utopia as an imagined, ideal society. In *Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions*, literary critic and philosopher Fredric Jameson illustrates that this definition is just the tip of the iceberg.

Jameson suggests several forms of utopia, each with its own literary form. He distinguishes

between the "Utopian program," which is expressed through revolutionary praxis, intentional communities, literary texts, etc., and the "Utopian impulse," which finds "its way to the surface in a variety of covert expressions and practices" (*Archaeologies* 3). In other words, the Utopian program is intentional and characterized by totality and closure, while the Utopian impulse may express itself in subtle and unexpected ways.¹⁷

Jameson looks to *Utopia*, the sixteenth century socio-political satire penned by English humanist Thomas More, to establish some underlying characteristics for the utopian literary tradition. For example, Jameson notes that closure is achieved when the founder literally digs a trench to separate the peninsula from the mainland and creates the island of Utopia. This gesture, "motivated by preservation of radical difference (as well as fear of contamination from the outside and from the past or history)," effectively turns all utopias "into islands" (*Archaeologies* 204). In this inaugural text, travel or dislocation is necessary to prompt reflection about the differences between Utopia and its non-utopian neighbors.

Jameson stresses that *Utopia* was neither taken seriously as a political project nor was it ridiculed as wishful thinking. Instead, he situates the utopian literary tradition as a subset of satire "specifically devoted to the imagination of alternative social and economic forms" (*Archaeologies* xiv). As a form of satire, the utopian literary text is in dialogue with other texts and discourses, and significant attention must be given to intertextual references in order to go beyond a superficial reading. In the case of *Utopia*, this involves everything from medieval

¹⁷ It is important to note that *Archaeologies of Desire* focuses on the work of primarily white authors from the Global North and that Jameson had previously dismissed "Third-World Literature" for conflating the personal and the political; that is, for always serving as an allegory for the "embattled situation" of 'Third-World' countries. He argues that this distinction places such works in a different analytical category from the canonical texts of the Global North. I think that Jameson's theorization of utopia would have benefitted from a more inclusive corpus and, in relation to the analysis at hand, I believe that "postcolonial" science fiction adds nuance to concepts like the Utopian impulse and the Utopian program. See Jameson 1986.

monastery life and Greek philosophy to Incan economic practice and the rise of Protestantism. In the case of subsequent texts, this also includes intertextual references to the entire utopian (and dystopian) literary tradition.

In the second half of the twentieth century, two variations of the Utopian program arose that explicitly incorporate the Utopian impulse. In *Demand the Impossible: Science Fiction and the Utopian Imagination,* literary critic Tom Moylan explains that *critical utopia* took shape within the context of ecological, feminist, and new leftist movements of the 1970s. This variation "rejects utopia as a blueprint while preserving it as a dream" (Moylan 10). It does so by creating an imperfect utopia and drawing attention to the tension between the literary utopia and its real-world context. Along these lines, *Midnight Robber* is a *critical utopia*. It presents an idyllic pan-Caribbean society that addresses real-world issues of racism, discrimination, slavery, and dispossession. The society is isolated on a fictional planet, and it is only through travel to an alternate dimension that the young protagonist begins to discover the dark secrets that made the utopia possible. With this knowledge, she decides to eke out a difficult yet ethical existence in the shadow dimension. The novel ends with a shimmer of hope when it is revealed that the protagonist's infant son has the capacity to transcend dimensions.

Moylan and co-editor Raffaella Baccolini explore the second variation, *critical dystopia*, in the 2003 anthology *Dark Horizons: Science Fiction and the Dystopian Imagination*. They begin by noting the general characteristics of dystopian fiction. They speak of a protagonist that is immersed within a society that is worse than our own, who slowly becomes aware of the nightmare s/he is living. The relationship between language and power is at the core of this process. Baccolini and Moylan explain that, "the dystopian protagonist's resistance often begins

with a verbal confrontation and the reappropriation of language, since s/he is generally prohibited from using language, and, when s/he does, it means nothing but empty propaganda" (6). Ultimately, the dystopian protagonist fails to escape or change their circumstances. According to Baccolini and Moylan, *critical dystopias* avoid this nihilism; these texts resist closure through ambiguity, genre blurring, and open endings. For example, *Habana underguater* resists closure by decentralizing power. In addition to the Soviet government ruling from space or the transnational corporations and militarized institutions vying for power on land, there is a more ambiguous struggle for space taking place between human and non-human characters on the Global Neural Network. Even more significant is the fact that these non-human characters, representative of Yoruba and Taino religions, introduce a moral relativism that escapes both postmodern apathy or Judeo-Christian conceptions of good and evil.

Whether it is utopia exposed as imperfect or dystopia subverted through subtleties, both sub-genres share an investment in the possibility of a better future. The work of philosopher Ernst Bloch can help to further unpack this attachment. Over the course of more than 1,000 pages, Bloch identifies two different kinds of future in his 1959 monograph *The Principle of Hope*: that which is overwhelmed by "What Has Been," on one hand, and the "Not-Yet-Conscious, Not-Yet-Become," on the other (Bloch 6-8). ¹⁸ The latter can only be glimpsed or felt, since "future of the genuine, processively open kind is sealed off from and alien to any mere contemplation" (Bloch 8). Bloch undertakes the lofty task of teasing out the Not-Yet-Conscious within art, literature, theater, dreams, political projects, and more. Along these same lines, I seek

¹⁸ For a more contemporary engagement with Bloch's categories, see Muñoz 2009.

to explore the tension between the burden of the past and the possibility of a radically different future in *Midnight Robber* and *Habana underguater*.

3.1.4 Information Technology

Last but not least, there is infrastructure. Just like water pipes, electricity, or roads, information technology is an assemblage —of physical structures, systems, people, and machines — that keeps society running smoothly. In *The Rise of the Network Society*, sociologist Manuel Castells defines information technologies as those involved in the generation, processing, and transmission of information, ranging from computers, networks, and programs to broadcasting, genetic engineering, and biotechnology (29). In my analysis of *Midnight Robber* and *Habana underguater*, I focus my attention on networks, quantum computing, and artificial intelligence. These are familiar enough terms yet at the same time they are quite abstract. What exactly are they? How do they work? And how are they entangled with humans and literature? These questions will be explored within the textual analysis; however, before we proceed it would be helpful to review some basic details.

Network: A global network was made possible by a series of groundbreaking innovations in the second half of the twentieth century. Castells explains that the invention of semiconductors, which process electric impulses in binary code, allowed for the "coding of logic and of communication with and between machines" (40). Subsequent innovations in broadcasting technology, cables, and fiber optics provided the foundation for the transmission of information between localities. Finally, the Internet, an innovation of the US Department of Defense, is based on packet-switching technology in which files are divided into blocks, each of

which is packaged with its origin, order, and destination. Once each packet has traveled independently along the network, the information is reassembled at the receiving end. According to Castells, the development of computers and the Internet has led to the moment we are currently living, an information age characterized by horizontal communication and constant innovation. This does not mean that the Internet was an equalizing force; Castells recognizes that, "While everyone and everything on the planet felt the effects of this new social structure, global networks included some people and territories while excluding others" (xviii).

Quantum computing: Physicist Michael Raymer explains that nearly all of the computers we use today are based on classical mechanics, a form of physics that dates back to Sir Isaac Newton, built upon the premise that objects have "definite properties and predetermined behavior" (Raymer xix). Although these classical computers have become more and more powerful over the last decades, they are ultimately limited by a scaling problem, that is, the increasing complexity of an operation requires an exponentially increasing amount of resources. Raymer dedicates several chapters of his book on quantum physics to the implications of the eventual development of a quantum computer that could overcome many of the limitations of classical computing. He explains the foundation of quantum mechanics in depth. For example, if classical computers rely on a binary system of two mutually exclusive states (0 and 1), quantum mechanics is based on the superposition of multiple states or trajectories for a single particle. It is not that these states occur simultaneously, but rather that quantum mechanics focuses on uncertainty and probability rather than predetermined outcomes. Raymer explains that, "The usual rules of logical thinking, such as saying, 'It is located here or it is not located here,' do not

apply to quantum objects. Instead, it is said, 'Both possibilities must be superimposed in our thinking and not considered separately'" (8).

Another fascinating concept explored by Raymer is entanglement. Scientists have discovered that quantum particles develop relationships or configurations between one another. In other words, two entangled particles would maintain a specific configuration, even if separated by a great distance. Any changes to the state of one particle would be reflected in the other instantaneously (Raymer 171-172). Existing technology is currently too slow to harness the potential of this phenomenon, but eventually entanglement could revolutionize encryption, security, and ultimately communication itself. Considering the implications of both superposition and entanglement, it becomes clear that quantum computing may have far reaching consequences for how we perceive, understand, and represent the world around us.

Artificial Intelligence: From the normalization of virtual personal assistants in phones, houses, and personal computers to disconcerting headlines about AI-created art and language, self-driving cars, a burgeoning sexbot industry, and the first robot citizen, we can feel the buzz of artificial intelligence all around us. Neural networks are responsible for many of these innovations. A deep neural network is composed of many processors, also known as neurons, that work together. The neurons are organized into layers, one layer that gathers input, several that process input, and one that produces an output. Each neuron completes a simple function, and these are combined to achieve a more complex function (Kelleher 67-68). Deep neural networks are particularly skilled at deducing cause-and-effect relationships and identifying patterns. They are widely used for image and video recognition, language processing and speech output, and providing recommendations (Kelleher 15-16).

Although these neural networks can carry out some functions of human cognition, many AI scientists say that we have not yet achieved artificial intelligence. This begs the question: What is artificial intelligence? What constitutes consciousness? In his 1950 paper titled "Computing Machinery and Intelligence," Alan Turing discards the question "Can machines think?" as impossible, and instead proposes the "imitation game," in which an examiner blindly discusses a variety of topics with two test subjects in order to determine which is the machine and which is the human. If the examiner mistakes the machine for a human over 50% of the time, it is determined that the machine convincingly imitates human intelligence and, for Turing's standards, is deemed intelligent. Almost 70 years later, this basic premise is still the point of departure in the field of AI research. In 2017, for example, an experiment presented AI-created art alongside art from internationally renowned artists. The AI-created art was perceived as human-made 53% of the time and the human-made art was only correctly identified 41% of the time (Elgammal et al. 15).

The Turing test measures the ability of a machine or program to quickly process input and produce text, speech, or art in a way that humans perceive as natural. These are fascinating exercises, yet perhaps not as essential as the deeper ethical questions. From the discipline of sociology, Susan Leigh Star suggests that the "Turing test should be replaced by the 'Durkheim test,' that is, systems should be tested with respect to their ability to meet community goals" ("Structure" 243). Recalling the quotation by Hopkinson in the opening paragraph, for example, what would those technologies look like if they were programmed by and for an Afro-Caribbean community? Also, if a program truly becomes sentient, will self-preservation overcome protocol? Is the concept of free will inextricable from our understanding of

consciousness? Finally, what are the limits of programming and what sort of ethical code might the perspective of a quantum brain make possible? Taking into consideration the material characteristics and philosophical concerns raised by these three different forms of IT infrastructure, I will now explore the entanglement of culture and technology in two contemporary Caribbean novels.

3.2 Cyberspace and Place in *Habana underguater*

How do Cubans write cyberpunk if they don't even have cellphones? Cuban author and literary critic Maielis González Fernández fielded this question at an academic conference in Spain in 2017. González then posted the exchange to her personal Facebook page where she and her colleagues unpacked the misguided question. Not only had cellphones become commonplace in Cuba by 2017, but they also have little to do with cyberpunk, a sub-genre of science fiction that reflected the emergence of the Internet and personal computers in the 1980s and 1990s. At the very least, a slightly more informed question might have referred to the issue of connectivity on the island. Since the fall of the Soviet Union, the Cuban government has viewed IT technology as a means for the infiltration and circulation of subversive ideas. Personal computers were prohibited until 2008, access has been limited to a national *intra*net of websites approved by the government, and IT infrastructure has been updated at a snail's pace.

Resolver and inventar are terms that have come to define everyday life in Cuba since the collapse of the Soviet Union triggered an extreme economic crisis on the island. Both terms reflect resourcefulness. Inventar is the ability to make do, to survive from one day to the next, while resolver refers to finding a solution to a seemingly impossible situation. The challenge of

connectivity is no exception. From Local Area Networks mounted by gamers, hackers and activists to share information freely within a limited radius, to the weekly *paquete* of pirated TV media from abroad circulated through pen drives and external hard drives, information is stored, shared, and disseminated in many ways. Rather than limit the imagination of a Cuban author at the moment of imagining a cyberpunk future, this uneven access draws attention to the inner workings of information technology.

Approaching infrastructure as an ecosystem of people, things, standards, and structures, I will consider the IT infrastructures represented in the *Habana underguater* saga by Cuban author Erick Mota. *Habana underguater* was released in 2010 and its sequel, *Habana underguater: Los propios rusos*, is set for publication by Editorial Hypermedia in 2020.¹⁹ The two novels take place in Havana, on Russian geostationary platforms and, most importantly, within cyberspace itself.

3.2.1 Ciberpunk con "i" latina

The cyberpunk sub-genre of science fiction exploded in North America with the emergence of personal computers and the Internet in the 1980s. This new information age marked a global transformation, and the literary sub-genre played a role in shaping the discourse for the new technologies. The term cyberspace was coined by U.S.-Canadian author William Gibson, first in a short story, and later developed in his *Neuromancer* saga. Inspired by watching adolescents engrossed in video games, Gibson created the name to describe the "realm of total-immersion virtual reality" that makes up the "notional space behind all computer

¹⁹ In this dissertation, I quote from the unpublished manuscript with the author's permission.

screens" (Jones). Within the fictional world of cyberpunk, the expansiveness of this new horizon is contrasted by an oppressive setting of urban wastelands controlled by corporations, which in turn reflect the expansion of neoliberal capitalism.

Two of the original cyberpunk authors declared the death of the sub-genre shortly after it began. Bruce Sterling and Lewis Shiner, in their respective essays "Cyberpunk in the 1990s" and "Confessions of an Ex-Cyberpunk," expressed reserve about the mass popularity of the sub-genre and the subsequent loss of values. Sterling emphasized the anarchic and egalitarian nature of the original movement, epitomized by a street-level, freely distributed *zine*. He explains that the original cyberpunks explored the pressing moral issues of how and to what end the human condition was changing. Shiner, for his part, describes cyberpunk as "escaping, virus-like, into the mainstream" where it became a cliché that "gives Nature up for dead, accepts violence and greed as inevitable, and promotes the cult of the loner."

Cyberpunk had certainly changed, yet some of the changes were necessary. Over the course of the 1990s and 2000s, the sub-genre began to reflect perspectives and concerns beyond those of the white, North American, self-denominated "cyberpunks" of the 1980s.²⁰ New voices from Latin America, Europe, Asia, and from within North America would shape the sub-genre and, at the same time, cyberpunk would take on a new meaning within each new context. Mota himself explains that for Latin American authors and readers it was neither the implants nor the neon lights that caught their attention: "Fue la miseria, la pobreza, la postguerra sin guerra previa, fue el miedo al capital extranjero que ya estaba en sus países" ("*Cyberpunk*" 6). For

²⁰ In his essay, Bruce Sterling identifies the original group of cyberpunks that fit this description, including himself, Lewis Shiner, Rudy Rucker, William Gibson, and John Shirley. Female authors, such as Pat Cadigan and Alice Sheldon (pseudonym James Tiptree Jr.) were later acknowledged as classic cyberpunk authors.

many, this regional form of cyberpunk is distinguished from the original movement by the phrase *ciberpunk con i latina*.

In the case of Cuba, cyberpunk underwent an even greater transformation due to the complex political and economic history of the island. In the article "From Socialist Realism to Anarchist Capitalism: Cuban Cyberpunk," Juan C. Toledano explains that prior to the revolution Cuban authors sought inspiration in the US science fiction scene. However, in the 1970s and 1980s, the political alliance between Cuba and the Soviet Union would lead to institutional support on the island for socialist-themed science fiction. Finally, the 1990s marked yet another abrupt change when the Soviet Union collapsed, Cuba entered an extreme economic crisis, and pirated copies of North American cyberpunk classics arrived to the island. As a result of this trajectory, Toledano explains that the Cuban cyberpunk is a true anarchist who rejects both "socialist realism and imperialistic late-capitalism" (450). Along these lines, it is important to note that the Cuban cyberpunk is not necessarily a nihilist. Like many anarchists, s/he explores pressing moral issues related to the human condition.

Maielis González Fernández has explored how Cuban cyberpunk effectively engages with the political, economic, social, and literary context in which it was written ("Distopías"). Of the authors considered in her study, Erick Mota stands out for inverting the cyberpunk script to create a socialist rather than capitalist dystopia. In contrast to an urban wasteland created by multinational corporations, *Habana underguater* is based on the premise that the Soviet Union won the Cold War and amped up their imperialism on the Caribbean island until the hostile environment on earth, due to climate change and religious warfare, drove the Russians to establish the *Estados Soviéticos del Espacio*.

This uchronia, or alternate history, sidesteps the fall of the Soviet Union, the collapse of the Council for Mutual Economic Assistance, and the ensuing economic crisis that led to tens of thousands of Cubans trying to leave the island (in *Habana underguater* the *balseros* and migrants arrive to Cuba from the United States). In the fictional universe created by Mota, the Soviets eventually withdraw economic support yet continue to exert their influence through surveillance and the threat of nuclear weapons, which they now control from space. On the ground, a militarized police force, Afro-Caribbean religious organizations, and the inevitable transnational corporations vie for control of the sunken city. Ruins, scarcity, chaos, and surveillance pervade *Habana underguater*. The setting merges the typical post-apocalyptic cyberpunk atmosphere, nods to the economic crisis of the 1990s, and imagines twenty-first century Soviet imperialism.

Habana underguater also stands out within the sub-genre for its treatment of Afro-Caribbean religions. Mota notes that William Gibson got the whole world talking when he incorporated a few characters and references from Haitian Vodou into the *Neuromancer* saga ("Cyberpunk" 12). And while Mota considers Neuromancer a significant influence in his own writing, he sees great potential for the incorporation of the religious and cultural diversity of the Caribbean region into the sub-genre. He calls for a Caribbean cyberpunk that sees mysticism and religion as just as a valid as cyberspace or artificial intelligence.²¹

²¹ In the same essay, Mota mentions authors that have incorporated mystical elements into cyberpunk, like Chilean author Jorge Baradit. In a personal interview in 2018, he further developed the concept of Caribbean cyberpunk, including Jamaican-born author Nalo Hopkinson and Dominican author Rita Indiana Hernández.

3.2.2 Cuban Connectivity

When you have the ability to access and send information with minor, temporary interruptions and no noticeable surveillance or censorship, it rarely crosses your mind to think about the electrical grids, computer hardware, routers, gigabytes, fiber-optic cables, data centers, satellites, antennas, governmental policies, or agencies that make the Internet possible. In Cuba, however, the user is acutely aware of the physical installations, technologies, and policies that make up the Internet. It is in fact a misnomer to speak of only the Internet —the World Wide Web— since it is just one of many forms of IT infrastructure on the island. The backbone of this ecosystem is the *intra*net, a national network that includes email, an encyclopedia, and other government-approved websites. Access to the *intra*net is provided at government institutions and for some professionals through a home dial-up connection. Until 2015, access to the World Wide Web was provided in hotels and at some Internet cafés at an exorbitant rate of 4-5 Cuban Convertible Pesos (CUC) per hour, inaccessible for most Cubans.

Today, undersea cables connect every continent except for Antarctica and provide ever faster, more reliable, higher bandwidth connections to the World Wide Web. Cuba was connected for the first time in 2013 when construction was finished on the ALBA-1 fiber-optic telecommunications connecting Cuba to Venezuela. The ALBA-1 cable supports the existing satellite telecommunications infrastructure on the island (Baron and Hall 12-13). By 2015, Wi-Fi hotspots in public parks were opened across the island to offer Internet connection at a rate of 1-2.5 CUC an hour. At this price, high-speed Internet is still inaccessible for many Cubans. Furthermore, connection is only available in public spaces. Artist Luis Manuel Otero Alcántara made a statement about this lack of privacy in his performance "Unidos for el wifi" on

November 28, 2015. To celebrate his first wedding anniversary, he performed a striptease accompanied by mariachis at one of the newly activated hotspots on the busy corner of 23 y L. The performance was recorded and streamed live for his wife, living in North America, shared on social media, and distributed "mano en mano," that is, between cellphones, with flash drives, and even in the *paquete semanal*.²²

The hotspots were a positive development if compared to the national *intra*net or the exorbitant rates and exclusive atmosphere at hotels. Nevertheless, "Unidos por el wifi" illustrates that the public location serves as a subtle —or perhaps not so subtle—form of surveillance and censorship. We can add to this the price, the fact that certain websites and content are blocked or slowed down, and the preemptive detention of activists and artists that promote their protests and performances online.²³ In sum, the fall of the Soviet Union triggered not only an economic crisis but also an official stance of suspicion toward the Internet that persists until today, the combination of which has led to a truly singular IT ecosystem on the island.

In the alternate history created by Mota, the Soviets trigger a Special Period-like crisis when they withdraw to space, yet the Internet, rather than representing a threat to the regime, becomes a means for maintaining their empire on earth. This also means that *Habana* underguater imagines a connected Cuba, a Cuba that forms part of the World Wide Web. The fictional Global Neural Network is the result of Japanese innovations in gaming and virtual

²² The documentation originally posted to the artist's website is no longer available. For a video of the performance, see https://www.youtube.com/watch?v=cbGL59j6P5o. Also, see Núñez Leyva 2015. Núñez notes that the connection that day did not allow for the performance to be streamed live. Instead, it was filmed and later sent by email.

²³ Performance artists Tania Bruguera, Danilo Maldonado, and Luis Manuel Otero Alcántara use social media to promote performances and to document censorship if they are detained or otherwise prevented from realizing the performance.

reality, ultra-high speed communications protocols developed by India and Pakistan, and the processing power of space-based quantum servers installed by the Soviets (Mota, *Los propios rusos* 78, 145). These technological advances make for cyberspace as it was imagined in 1986, a realm of total immersion. Users enter through a jack in the back of their neck, and all of their senses are immersed in the simulation. The neck implant also makes it possible to trace the location and neural activity of each user. Sentient firewalls and other safety protocols programmed by the Soviets have the capacity to immobilize, eject, or even kill users via electroshock.

For many characters in *Habana underguater*, connecting to the Global Neural Network becomes a costly addiction. Wealthy individuals can afford to install a connection in the privacy of their own home and pay for rehab. Others must pay hourly rates to connect, and even higher rates if they wish for a connection that evades the protocols mentioned above. The character *El Mago* charges a premium to reroute the neural connection through a rabbit, which protects the user from surveillance and electroshock. Users also create their own networks from the ground up, which allow them to connect with other individuals within a limited radius without the expense or risk of connecting to the Internet. This complex map of connectivity —from costly pay-by-the-hour access and black market connections to private local area networks— reflects the reality of IT infrastructure in the second decade of the 21st century in Cuba.²⁴

Mota explores the impact of location on this ecosystem, from the electricity and servers that keep the network running to the standards and protocols that govern it and the content and users that inhabit it. This perspective goes beyond the view of the Internet as a liberating force

²⁴ Published in 2010, *Habana underguater* anticipated the expansion of pay-by-the-hour access to the Internet.

and situates it within a more complex web of energy independence, (self-)censorship, colonialism, and the preservation of local beliefs and customs. This approach to the IT infrastructure makes it clear that the Internet did not establish a raceless, placeless, bodiless utopia.

Nuclear power and quantum computing are the two large-scale factors that determine the nuances of IT infrastructure within the two novels. In Mota's alternate history, the Caribbean island has achieved energy independence through nuclear power plants in the Santa Clara province. The fragility of the infrastructural ecosystem becomes clear when Santa Clara uses its nuclear reactor, the source of electricity for Havana, as leverage for negotiating political asylum for the young hackers at the end of the first novel. The representative of Havana is left at the mercy of the ambassador from Santa Clara when the latter threatens to cut electricity for the six million *habaneros* that have come to depend on it.

Santa Clara may have the upper hand when it comes to negotiating with other provinces on the island, but the Soviets have all the cards when it comes to technology and power. They control the Global Neural Network through space-based quantum servers, and they enforce their authority with nuclear warheads. The characters on the ground in *Habana underguater* censor themselves and police each other in order to avoid Soviet intervention. In the second installation of the saga, the Autonomous Province of Santiago attempts to defy this authority by developing nuclear capacities and installing quantum servers on Cuban soil.

On a smaller scale, the body of the individual user also forms part of the IT ecosystem.

Through a third-person omniscient narrator, the reader gets a glimpse of the embodied experience of the user. As they connect from tropical Havana, the characters note the stifling heat

or the chill of the air-conditioning, they feel the insertion of the cable in the back of their neck or the pinch of the needle for the intravenous drip that will sustain them while they are connected (Mota, *Los propios rusos* 40). Once they are within virtual reality, they assume an avatar with Asian or Slavic features, a reminder of those who developed the software and those who control the Network. As they disconnect, their senses peel away one by one as they slowly return to their body, sitting at the console. In many cases, the connection is interrupted by an intrusion or attack, and the tumultuous atmosphere quickly brings the user back to physical reality.

3.2.3 Negotiating Space in Cyberspace

I will now analyze a series of encounters between human and non-human characters within cyberspace. These encounters provide a more nuanced view of the Internet. Rather than a mystical flattening of time and space, the Internet is shown to be a finite, physical place whose territory is under dispute. The Global Neural Network, simply *La Red* for its human users, is *El Mundo*, or the world, to the sentient programs that control the movement of human users in and out of the virtual spaces. At the same time, cyberspace has become the twenty-first century version of *El Monte* for the Orishas that inhabit dead links and thrive upon the excess information created by users. ²⁵ This entanglement between the physical network, human users, AI-programs, and Orishas exemplifies the merging of the technical and spiritual called for by Mota. At the same time, these encounters allow the author to explore themes related to information technology, the human condition, and the singularities of Cuban history and culture.

²⁵ The hilly, tropical forest where the Yoruba deities live according to West African and Afro-Caribbean religion. See Cabrera 1993.

3.2.3.1 Information Exchange with the Orishas

The first novel follows a quest plot in which a young hacker steals an $\acute{E}bbo$ or offering made to one of the Orishas. The multiple factions on the ground seek to get their hands on the offering while the young hacker and his friends attempt to restore it to its place without being electrocuted by sentient firewalls or the Yoruba deities that inhabit the Network. Curiosity soon gets the best of them, and together with two mercenaries that were sent to kill them, they use the information stored in the $\acute{E}bbo$ to make "el hackeo del siglo."

The motley crew discovers that the offering to Ochosi contains a map to a hidden location on the Network. As an advanced security measure, the information can only be deciphered from the same location in which it was encrypted, in this case the towers of the Baptist Corporation.

The hackers connect again and enter a virtual replica of Solomon's Temple. A glowing gelatinous substance, with strands of light running along its formless body, evokes a sea anemone as it covers the entrance. Within the temple, a hyperlink, represented by another gelatinous membrane, provides access to the database that they seek. Animated statues, created by the sentient firewall, attack the avatars until only two are left within the simulation.

A dark shadow appears, engulfs the firewall, and sends chills down the spine of the avatars. The amoeba-like shadow presents itself as Olukun, Orisha of the depths. He makes it clear that he is not concerned with Juan or the stolen $\acute{E}bbo$ but instead has a question for the other hacker, Marta. If she answers satisfactorily they may leave, if not she will be turned into a *caballo* for the Yoruba deity, so that he can possess her and experience physical reality whenever he chooses. He asks what the sea looks like during a storm, and Marta gives an elaborate description of a moving scene, effectively earning her freedom.

The reader gets a glimpse of simulated reality and a material representation of immaterial cyber objects, like hyperlinks and firewalls. Above all, this scene allows us to get a sense for the central role of information in cyberspace. Olukun begins the scene by stating that, "El trofeo de la información debe ser pagado con el precio de la información" (Mota, *HU* 150). The Yoruba deities thrive on the information that sustains the Network. They collect access codes, secret passageways, and all sorts of forgotten data and abandoned places in cyberspace (Mota, *HU* 120). In exchange for the virtual route encrypted in the *Ébbo*, the Yoruba deity asks for a different type of information, he asks the hacker to immerse him in the effable experience of the sea during a storm. An emboldened Marta reminds Olukun that he will never be able to feel the sea since he is a prisoner of his sea of information: "Ninguna de esas cosas podrás sentirlas jamás. No eres un dios. Estás preso en tu océano de pulsos binarios, como nosotros lo estamos allá afuera" (Mota, *HU* 151-152). In this instance and others, the human characters share their embodied experience of physical reality with the Orishas in exchange for valuable information from the Network.

3.2.3.2 Ochosi as Deus Ex Machina

The hackers perform the security breach of the century through an unexpected collaboration between hackers, mercenaries, rebellious AI-programs, and the Orisha Ochosi. The human participants must act in perfect synchronicity as the hackers follow the virtual route encrypted in the $\acute{E}bbo$ and the mercenaries travel to a bank vault on the Soviet geo-stationary platforms. Significantly, the success of the heist depends upon a conversation between Ochosi and a sentient firewall. Ochosi, god of justice, of the hunt, and of the persecuted, intervenes to

make his case before the firewall has a chance to kill the young hacker. Ochosi defends the risky actions of the young hacker, stating: "Inteligente es aquel que rompe las normas y decide labrar su propio camino" (Mota, HU 191). He celebrates the hacker who defied Soviet authoritarianism and benefitted from the corruption and greed of the Baptist and Catholic corporations that seek the $\acute{E}bbo$.

In her study of Cuban cyberpunk, literary scholar Emily Maguire stresses that the hacker protagonist typically straddles the line between what is permitted and what is illegal, all within a violent urban setting in which technology is both the tool of oppression and a means of liberation (508). Maguire notes that within this ambivalent moral setting, the hacker could save the day or just as easily become a threat to society. While both the figure of the hacker and the setting of *Habana underguater* match this description, the novel stands out due to the fact that Ochosi, god of justice, intervenes to provide a moral compass. Ochosi forms part of the Yoruba belief system, which is portrayed within the novel as distinct from postmodern ambivalence and traditional Judeo-Christian morality:

El pueblo una vez conocido como los Yoruba no representaba al mundo como un conflicto entre el bien y el mal, entre la luz y las tinieblas, entre Dios y el Diablo. Reconocían en su realidad que todos los poderes, aun los divinos, tienen posibilidades tanto destructivas como constructivas. (Mota, *HU* 90).

Within this framework, morality is presented as complicated and relative. In *Habana* underguater, Ochosi examines each action within its context and encourages the human and non-human characters to do the same. The AI-program follows Ochosi's advice and shows mercy to the hacker, he and his friends find political asylum after the heist of the century, and daily life continues in the submerged city.

3.2.3.3 Revolutionary AI

While making his case to the sentient firewall, Ochosi also calls into question the intelligence and morality of the human programmers: "Dices que debes ser fiel al programa primogenio. ¿Qué tal si la persona que lo programó lo hizo para matar a cien personas? Cien vidas dependen de tu fidelidad a un código frío, escrito por alguien menos inteligente que tú" (Mota, *HU* 191). The god of justice asks if killing for the safety and stability of the Network is ethical. In order to decide, one must know the intentions of the programmers who created the AI protocols, as well as who benefits from them. In her analysis of the novel, literary scholar Rachel Price interprets this discussion between Ochosi and the firewall as a specter of enslavement that continues to haunt the Caribbean.

Price proposes the concept of Afro-Cuban futurism to explain this scene and several others in *Habana underguater*: I agree with her interpretation and I find the concept compelling, yet I wonder if there is a broader term that might encapsulate the history of enslavement and European colonialism as well as the diverse panorama of twentieth and twenty-first century political transformation in the region. In the case of *Habana underguater*, for example, this includes the Cuban Revolution. I have proposed the term Caribbean futurism as a working concept for this chapter, but I do worry that it could take importance away from the experience of Afro-Caribbean populations and minimize the foundational work of Afrofuturism. Regardless of the term used, in reference to the scene at hand, I suggest that the rebellious AI evokes the specter of enslavement and, at the same time, expresses contemporary disillusionment with the revolutionary government. In the latter sense, the scene can be read as a classic example of

cyberpunk anti-authoritarianism which, in twenty-first century Cuba, would be considered an act of political dissidence.

The second installation of the saga supports this reading. We learn that the AI-programs are divided into several blocs: orthodox AI that seek to maintain their central role on the Network, *imbuistas* that have joined forces with programmers in hopes of gaining a permanent place in cyberspace, and renegade AI that have led an unsuccessful revolt against the Code of Loyalty to the User. At one point, the leader of the failed revolt asks what the point of it all was, since the renegades were exiled to the margins of the Network and the Soviets imposed even stricter protocols. These different ideological blocs do not necessarily translate to real-life groups in Cuban politics, yet exile, repression, and self-interested political maneuvering are recurrent themes in contemporary Cuban literature. ²⁶ Finally, the Code of Loyalty can be read as satire of the revolutionary contract. In Community and Culture in Post-Soviet Cuba, literary critic Guillermina De Ferrari explains that the socialist social contract required citizens to pledge loyalty to the government in exchange for a wide array of services and social infrastructure. She notes that although the government failed to uphold its part of the bargain, it continued to enforce the contract despite pervasive discontent (Community 3-6). In this sense, I suggest that the failed rebellion mirrors unrest —and repression— in late twentieth and early twenty-first century Cuba.

3.2.3.4 The Return of the Cemies

The coexistence of humans, Orishas, and AI-programs on the Global Neural Network is thrown into disarray by the appearance of Taino gods and mythical creatures on the Network. In

²⁶ La fiesta vigilada, by Antonio José Ponte, contains all of these themes.

the final scene under consideration, which takes place in a part of the Web supposedly inaccessible to the human eye, several hackers look on as a *güije*, a pre-Colombian river monster, confronts several Orishas. The *güije* explains that the Autonomous Province of Santiago has installed quantum servers on Cuban soil, challenging Soviet hegemony and unleashing the *güije* and its masters, Taino deities known as *cemies*, into cyberspace. The *güije* wreaks havoc on the local and global networks, leading Orishas, AI-programs, and human characters to attempt to capture it. The *güije* outwits them all and shares his message:

Nuestros ordenadores cuánticos tocan tierra. Una tierra más antigua que las estaciones rusas. Nosotros estamos a salvo del exterminio si los rusos desconectan la Red Neural Global [...] Vuestros trucos no pueden contenernos porque venimos de un nuevo Mundo, un nuevo espacio, una nueva Red. Un Mundo donde solo reina la anarquía. Donde ningún poderoso puede doblegar a nadie, ya sea hombre, inteligencia artificial o dios. Esa es la lección que deben aprender. (Mota, *Los propios rusos* 114-5)

The *güije* speaks of a new world that eschews any form of domination, simultaneously evoking slavery, colonialism, and authoritarianism within the Cuban context. And, as Juan C. Toledano suggests in his analysis of Cuban cyberpunk, anarchy is key.

This scene takes place in a complex, abstract space known as a phase space, subtly merging pre-Colombian mythology and advanced physics. A phase space is a model in which "all possible states of a physical system" are present simultaneously (Tao 1). Phase spaces can include finite or even infinite dimensions. Quantum mechanics, we shall remember, takes place at the atomic or sub-atomic scale and allows for the superposition of multiple states. Within this physical representation of an abstract space, the characters — *güije*, Orishas, and human avatars — attempt to trap each another with alephs, described within the novel as a bubble, a blackhole, and a multidimensional cage (Mota, *Los propios rusos* 115). This is a clear reference to the

fictional aleph under the staircase in the short story by Jorge Luis Borges. The Borgesian aleph is described as a point in space that contains all other points, from which one can observe all places of the universe from all angles.

These scientific and literary references signal a different way of seeing and knowing, gesturing toward the ability to accommodate contradictory information and see things from multiple angles at the same time. While the processing power of quantum computing is beyond the capacity of the human brain, the insistence upon anarchy and complexity in this scene serves to question the hegemony of a rational self that depends on sight and language to make sense of the world around it. When one of the human avatars finds it difficult to describe the experience of an aleph within a phase space, he comes to the realization that:

En el mundo real hay cosas que, como el infrarrojo o las ondas radiales, no se ven pero están allí. De igual modo en los espacios virtuales hay cientos de rutinas de programación y sub espacios, como el conjunto de rutinas que definen los gradientes de temperaturas o los puertos de entrada y salida de la red, coexisten con el «mundo» en el que se mueven nuestros avatares. (Mota, *Los propios rusos* 115)

From the sub-algorithms and coding that make up the Internet that we experience, or in this case, the simulated reality that the avatars experience, to infra-red lights, radio waves, and other forms of IT infrastructure, these barely perceptible processes and immaterial 'objects' coexist with the world that we inhabit. Mota himself emphasizes this idea of that which exists but cannot be seen in his call for a regional Caribbean cyberpunk, that sees mysticism and religion as just as valid as cyberspace and physics. In a personal communication with the author, he explained that spirituality and advanced science and technology are actually quite similar in the sense that they both help us understand the world around us and require us to have faith in something that we cannot see. These reflections from the author reiterate the underlying theme of this chapter. It is

an important exercise to put contemporary scientific and technological innovations and centuries-old West African and Taino religions on the same page, literally in the case of the novels under consideration and of this chapter, and figuratively in the sense of attempting to dismantle the colonial hierarchies that privilege the former over the latter.

3.3 An Ecological Reading of The 'Nansi Web in *Midnight Robber*

Oho. Like it starting, oui?

Don't be frightened, sweetness; is for the best.

I go be with you the whole time.

Trust me and let me distract you little bit with one anansi story.

So begins the narrative of *Midnight Robber* by Jamaican-born author Nalo Hopkinson. The novel is presented as a story to occupy an unknown interlocutor during an unidentified process. It is impossible for the reader to sort out who is speaking, to whom, and under what context, and it is not until the final pages of the novel that the identity of addressee, narrator, and the overall framing of the novel become clear. To the reader's surprise, they discover that they have been following the story of Tan-Tan as it is being told to her infant son, Tubman, during his own birth. In the final pages, the narrator speaks directly to his interlocutor with the same tender tone used in the first lines of the novel: "Whoops! It coming, it coming! That feeling is your head crowning, sweetheart—that is air on your skin of your scalp. Welcome into one of the worlds, pickney!" (328). In addition to this unconventional premise, we also learn the identity of the mysterious narrator, a detail that I will save for a little later.

The vague opening lines are sandwiched between a wealth of details that establish a postcolonial context for the twenty-first century novel. First, an epigraph in the form of the poem

"Stolen" by David Findlay celebrates the subversion of colonial discourse and language in post-slavery society. Then, in the opening scene, the narrator establishes a decidedly Afro-Caribbean setting through linguistic markers, the storytelling call and response "*crick-crack*" and toponyms that reference black revolutionary leaders from the Americas, such as *Garvey-*prime, *Douglass* sector and last but not least the fictional planet of *Toussaint*.²⁷ The unidentified narrator explains that they will tell the story of a strong woman named Tan-Tan as she travels between dimensions from the civilized planet of Toussaint to its dub or shadow side, New Half-Way Tree.²⁸

The Afro-Caribbean, postcolonial references and the mysterious narrator are embedded within a cybernetic utopia created when the *Marryshow* Corporation infused an entire planet and its citizens with nanobyte technology that connected them to a sentient network known as Granny Nanny or the 'Nansi Web.²⁹ Through virtual personal assistants called eshus, adaptable chicle gel robots, smart objects, and a web-based surveillance system, Toussaint is able to deliver its inhabitants from hard labor and violence. The identity of the narrator in fact turns out to be the eshu, or personal virtual assistant, of the protagonist. On the final pages, the reader learns that when Tan-Tan passed through the dimension veil between Toussaint and New Half-Way Tree, the ear bud that connected her to the 'Nansi Web malfunctioned and its nanomites migrated to the growing fetus, merging at the cellular level and turning his body "into one living connection to

²⁷ Toussaint L'Ouverture, the revolutionary leader of the Haitian Revolution; Frederick Douglass, the author, politician and orator instrumental to the abolition of slavery in the US; and Marcus Garvey, the black nationalist born in Jamaica and founder of the Pan-Africanism movement. The references share a common theme of transnational antiracist activism.

²⁸ New Half-Way Tree further develops the Afro-Caribbean postcolonial context by making reference to the Half Way Tree neighborhood of Kingston, Jamaica. See Smith 2009, p. 146.

²⁹ The *Marryshow* Corporation makes reference to *T.A. Marryshow*, the Grenadian orator and anti-racist politician while *Granny Nanny* recalls the Jamaican folk hero *Queen Nanny* or *Nanny of the Maroons* who founded an autonomous maroon society on the island in the eighteenth century.

the Grande Anansi Nanotech Interface" (Hopkinson 327). This symbiosis, together with the name Tubman, that is, "the bridge from slavery to freedom," suggests a hopeful future that pairs black liberation with knowledge of the past and technological innovation (Hopkinson 327).

The topic of technology has been a point of contention in the critical reception of Hopkinson's oeuvre. From a complete dismissal of her work by sci-fi gatekeepers to a defense of her focus on social issues, little attention has been given to the technical details of her technological speculations. In my analysis, I take into account Hopkinson's speculations about several branches of science and technology, specifically nanotechnology, quantum computing, and artificial intelligence. I examine both the metaphorical and material nuances of the Grande Nanotech Sentient Interface.

In *Midnight Robber*; I explore the ethical implications of an ecological approach to infrastructure. This approach, elaborated by Susan Leigh Star, calls upon us to look to the spaces between in order to perceive the silences and exclusions enacted by an interface. An ecological approach understands technology not as a tool or machine but rather as an entanglement of people, things, and ideas. Along these lines, I consider the utopian and dystopian aspects of the interface through intertextual references to science fiction, cyberpunk, and Afro-Caribbean history. Then, I examine the embodied experiences of the users, partial users, and non-users in order to highlight different attitudes toward the Web. Above all, I am interested in unpacking the subtle criticism developed against the idyllic utopia of Toussaint.

3.3.1 A Pan-Caribbean Cybernetic Utopia

The cyber infrastructure that pervades the novel and makes utopia possible on the planet Toussaint goes by many names. It is formally known as the Grande Nanotech Sentient Interface, attracting our attention to its reliance on nanotechnology and artificial intelligence. Another name, the 'Nansi Web, references nanotech, the idea of the Internet as a Web, and Anansi the spider, a key figure of West African and Caribbean oral storytelling traditions. Finally, the cyber infrastructure is personified as Granny Nanny, offering a remake of both Big Brother from the classic dystopian novel *Nineteen Eighty-four* and Queen Nanny, a maroon leader in 18th-century Jamaica. In the following pages, I explore the literary, technological, and historical references related to the interface which, although overwhelming at times, create a complex and nuanced portrait. As I lay out the many references, I examine how Hopkinson weaves together two seemingly unrelated topics: the role of technology in dystopian science fiction, on one hand, and the colonial and revolutionary history of the Caribbean, on the other.

Most readers will inevitably see Granny Nanny as a rewrite of Big Brother, the personified surveillance system from the novel *Nineteen Eighty-four* by British author George Orwell. Since publication of the novel in 1949, the term Big Brother has entered common usage, not only in its original English but also in many languages and all over the world. Today, Big Brother is used to name everything from reality TV shows to the increasing surveillance enabled by the Internet and even real-life instances of state-run surveillance. According to the Oxford English Dictionary, one of the current uses of the phrase is to describe "a political or administrative authority, esp. the State, exercising strict supervision of and total control over

people's lives; (hence) the agencies, institutions, etc., used by such an authority to monitor and control people's behaviour."

Orwell's Big Brother carried out surveillance via two-way *telescreens* that significantly predated the advent of smart TVs with web cameras and Internet connections. As a form of information and communications infrastructure the *telescreens* are decidedly dystopian. They transmit propaganda and simultaneously capture the protagonist's every movement and sound when he is in their vicinity. *Telescreens* and hidden cameras are placed in his home, his place of work and in public places. Ubiquitous print propaganda reinforces the ominous mood with the enormous face of a middle-aged man and the caption "BIG BROTHER IS WATCHING" YOU" (Orwell 3).

Advances in technology allow Granny Nanny to enjoy an even greater level of control than her literary predecessor. In *Midnight Robber*; Hopkinson explores the future of nanotechnology, which could also be described as *our* future with nanotechnology. Just as Orwell accurately foreshadowed the vertiginous trajectory from broadcast television to personal computers to smart devices, Hopkinson imagines the development and application of a technology that has infiltrated society at an even quicker pace. The US government first established the National Nanotechnology Initiative in the year 2000, the same year as the publication of *Midnight Robber*. Today, the official website of the governmental agency defines nanotechnology as "science, engineering, and technology conducted at the nanoscale," about 1-100 nanometers, where one nanometer is one-billionth of a meter ("What is Nanotechnology"). Nanotechnology takes place at the level of viruses, bacteria, and individual atoms. It has led to the development of lighter, stronger, more efficient materials that are now used in many everyday

items and some astonishing innovations. According to the US National Science and Technology Council, nanotechnology is responsible for ever faster and smaller information processors; enhanced medical imaging; more effective, less invasive treatment for diseases; regenerative medicine; genetic engineering; cleaner fuels; more efficient vehicles and aircrafts; increased quantity and quality of drinking water; and flexible and wearable technology and implants ("Benefits and Applications").

In Hopkinson's future world, nanomites, fused with animate and inanimate matter, serve as Granny Nanny's hands and body, ears and eyes. Nanomites transformed all of the Nation Worlds, including Toussaint, into "one enormous data-gathering system that exchanged information constantly through the Grande Nanotech Sentient Interface" (Hopkinson 9-10, 36). Nanomites powered the intergalactic ships that brought the settlers to Toussaint and they merged with the planet itself when the Marryshow Corporation drilled to its core, "plunging into the womb of the soil to impregnate the planet with the seed of Granny Nanny" (Hopkinson 2). Although Hopkinson uses flowery language to describe scientific processes, her speculations from almost 20 years ago are in line with current trends in nanotechnology research and development.

In addition to facilitating intergalactic travel and the colonization of a planet, the nanomites monitor citizens through smart houses, commonplace objects, and human implants, recording and responding to information about physical reactions to the environment, emotional states, overall health, interests, personality, criminal behavior and more. These minute details collected by the nanomites are processed by Nanny's "quantum brain" (Hopkinson 51). Quantum computing, which is still in infancy, depends on advances in nanotechnology to process quantum

bits, which do not ascribe to the fixed binary code of classical computing but instead represent an entirely novel approach to information and communication. A large-scale quantum computer would grant its users the ability to process information at a scale that is still unfathomable. The ethical question, of course, is who will wield such responsibility and knowledge. It is implied that Nanny exercises her power with benevolence and foresight. To create a world free of violence, she censors violent images and practices, she foresees and prevents violent crimes and, most importantly, she exiles those that commit violent acts that she was unable to predict (Hopkinson 30, 127). It is interesting that she overlooks gossip, infidelity, mischief, and even dissident sects, as long as she foresees "no harm to life nor limb" (Hopkinson 52).

The question of who will control the information infrastructure and to what end is a central theme of cyberpunk, a genre of science fiction that reflected the emergence of cyberspace via personal computers and the Internet in the 1980s and 1990s. Common preoccupations of the genre include the blurring of the boundary between humans and technology, the relationship between the individual and an imperfect world and, more specifically, the anti-authoritarian attitude of its hacker or loner protagonist. In response to these formulaic characteristics, literary scholar Jillana Enteen calls for the inclusion of authors like Hopkinson in the cyberpunk canon precisely because they offer "non-standard visions of futures that hold distinctively different conceptions of the connection between humans and technology" (51).

In Enteen's reading, Granny Nanny and the Marryshow Corporation eschew the traditional cyberpunk model of accumulation and corporate capitalism. She attributes this harmonious coexistence to the innovative code that Granny Nanny develops and that Marryshow, a programmer and specialist in Calypso music, is able to crack. The code is tonal rather than

binary, aural rather than visual. Enteen explains that the "operating language envisions an expansive system, beyond human perception, yet rooted in Caribbean music and of distinctively Caribbean invention" (265, 273). The Marryshow Corporation and Granny Nanny achieved large-scale quantum computing that led to space travel and the colonization of planets, and that allows them to monitor and guide every aspect of life for their community. Most importantly, this technological breakthrough emerged from the culture of the same community they would come to *protect*, *guard* and *guide* (Hopkinson 10).

Tan-Tan, the novel's protagonist, makes an unlikely cyberpunk antihero. Beyond her personal relationship with her eshu, she shows no interest in the technical details or code of the 'Nansi Web and, even at her most rebellious, a side of her that she describes as Bad Tan-Tan, she is committed to righting wrongs. It is instead the pedicab runners, also known as the programmer clan or the Sou-Sou Cooperative, that fulfill the cyberpunk outcast hacker role. In a society where hard labor has been made obsolete and information is instantaneously recorded, archived, and recalled through nanomite technology, the Sou-Sou cooperative chooses to engage in strenuous physical labour on a daily basis as pedicab runners and to live in isolation from Granny Nanny by using "headblind tools" and living in cooperative "headblind houses" (Hopkinson, 9-10). The programmer clan is also committed to learning Nanny's nuanced code. While it is impossible to completely turn off the interface, they have found that, "If you sing the right songs, as long as Nanny don't see no harm to life nor limb, she will lock out all but she overruling protocols for a little space" (Hopkinson 52). Although their "quid pro quo" collaboration with Tan-Tan's father may suggest that they may have an ambivalent moral code, the collective of hackers does succeed in upsetting "the foundational individualism of cyberpunk" (Enteen 269).

Hopkinson inverts dystopian tropes —like the surveillance state or corporate authoritarianism— by infusing them with Caribbean culture and history. Granny Nanny, for example, is named after Jamaican national hero Queen Nanny, also known as Nanny of the Maroons. Nanny was enslaved on a plantation in Jamaica until she fled to live as a maroon in the mountainous interior of the island. She distinguished herself as a leader and proceeded to lead raids on plantations, freeing others and eventually building an autonomous maroon society and negotiating treaties with the British colonial government. A description of Jonkanoo festivities in the novel highlights the similarities between the actions of the historical Nanny of the Maroons and the sentient network. The inhabitants of Toussaint celebrate their liberation, proclaiming: "Time to give thanks to Granny Nanny for the Leaving Times, for her care, for life in this land, free from downpression and botheration" (Hopkinson 18).

Queen Nanny's legacy is not without controversy, and as I will explore in the next section, all is not well in the Toussaint utopia. Precisely, literary scholar Ingrid Thaler has tied some of the contradictions and silences in the apparent utopia to the questionable concessions granted by Queen Nanny and other maroon leaders in the treaties following the First Maroon War (107). The treaties are remarkable historical documents that grant the maroons a "perfect state of freedom and liberty," land ownership, and the ability to seek justice for any aggressions committed against them by white Jamaicans (Campbell 126). In exchange, however, the maroons were expected to hunt down and destroy rebels, to return new maroons to their owners for bounty, to accept ambassadors of the crown in their communities and to defend the British colony in the event of a foreign invasion (Campbell 136). Thus, while Queen Nanny delivered the citizens of her community from bondage, she also made a pact with the British crown to

uphold the institution of slavery on the remaining plantations. As we will see later on, the colonization of the Toussaint and the freedom of its inhabitants similarly depend upon the violent exclusion of other groups.

Nevertheless, Granny Nanny is manifestly utopian if read within the context of the colonial and revolutionary history of the Caribbean. Granny Nanny is not only a reincarnation of Nanny of the Maroons but also responds to centuries of antiracist revolutionary thought and practice. A constellation of references to historical figures sets the tone in the first pages of the novel, which takes place on the planet Toussaint under the guidance of the Marryshow Corporation. Toussaint is a direct reference to Toussaint L'Ouverture, general and revolutionary leader of the Haitian Revolution, who convened the first Constitutional Assembly for Saint-Domingue. The new constitution declared self-governance for the French colony and named Toussaint governor. Though he died as a prisoner in France before General Dessalines declared independence for Haiti in 1804, Toussaint left an indelible mark not only in Haiti but also throughout the Americas. T.A. Marryshow was a twentieth century Grenadian politician key to the creation of the self-governing federation of the West Indies who similarly died before full independence.

Within the first pages of the novel, two seemingly passing references to the toponyms

Garvey-prime and Douglass sector further develop the revolutionary setting. Jamaican-born

Marcus Garvey and U.S.-born Frederick Douglass were and continue to be inspirational figures
to international antiracist movements. A century after Nanny of the Maroons and Toussaint

L'Ouverture, Frederick Douglass escaped slavery and became an author and orator instrumental
to the abolition of slavery in the United States. Finally, the 20th-century black nationalist

politician and journalist Marcus Garvey presents a striking complement to the novel's pan-Caribbean community and "Leaving Times" due to his creation of the Universal Negro Improvement Association, which promoted the creation of a nation for displaced people of African descent and the redemption of the African continent.

In 1974 jazz musician and performer Sun Ra introduced an interesting twist on Garveyism. In his film *Space is the Place*, Sun Ra himself arrives to a curious planet, absorbing the new sights and sounds before announcing his decision to "set up a colony for black people [...] on a planet all of their own." As the title clearly states, and as we also see in *Midnight* Robber, space is the place for black liberation. A recent dissertation about Afrofuturism titled "The Audacity to Imagine Alternative Futures" further unpacks the relationship between black liberation and space. Author Jennifer Williams explains that, "[Sun Ra] links space technologies with Africana people to challenge the dominance of a white construction of science as an empirical project," and also that "blackness [...] has to be extraterrestrial; otherwise, Africana people will be buried in the past of their imposed inhumanity" (258). Sun Ra is considered one of the foundations for Afrofuturism, an aesthetic with which Hopkinson has been associated since the publication of her first novel Brown Girl in the Ring in 1998. Sun Ra and his sci-fi movie Space is the Place clearly form part of this constellation of references even though they are never explicitly mentioned. These details offer a lens through which we can truly understand the significance of a space colony in which pan-Caribbean descendants enjoy political and personal self-determination and live free from violence and hard labour.

In sum, whether we read Nanny against the grain of dystopian science fiction, such as the classic novel *Nineteen Eighty-four* or the sub-genre of cyberpunk, or as a continuation of a long

history of Caribbean revolutionaries and antiracist activism, the Grande Sentient Nanotech Network and the community that she sustains on Toussaint are utopian. Yet this is not without shortcomings as we shall see in the following section.

3.3.2 The Grande Nanotech Sentient Interface and the Spaces Between

In a moving homage to Susan Leigh Star, Maria Puig de la Bellacasa cites one of Star's original poems about "The Net," which creates a vivid image of information infrastructure and is particularly fitting for the personified 'Nansi Web:

oh seductive metaphor network flung over reality filaments spun from the body connections of magic extend extend extend who will see the spaces between? (qtd in Puig de la Bellacasa 48).

Star was a key figure in the development of science and technology studies, which situates those fields within their social context, paying special attention to the construction of knowledge, the impact of classification systems, and the objects, knowledge, and people that are left out. Star proposed an analysis of technology "grounded in attention to that which escapes dominant visions but is still vital for the living of a world" (Puig de la Bellacasa 51). This approach serves to ask whose exclusion makes possible "the living of a world" in *Midnight Robber*. What can be found in the "spaces between" of the Interface? And finally, how does one explore those spaces? In this section, I consider Granny Nanny as a metaphor for nurturing and benevolence that is

slowly called into question through the eshu's dissidence, the young protagonist's open mind, and by allowing the most vulnerable populations to speak for themselves.

The "Net" flung over reality, with its magical connections, is certainly a seductive metaphor. As a personified surveillance network that uses her capacity to protect, guard, and guide her users, Granny Nanny is a similarly appealing metaphor. In an interview, Hopkinson explains that, "it really does feel like being mothered, and sometimes that's a good thing, sometimes it's a smothering thing" ("Conversation"). Despite the fact that the 'Nansi Web was not flung over reality, the image developed in the novel complements the sentiment of the poem. Nanny is a limitless network that extends beyond earth, crosses dimensions, and *seeds* Toussaint and all the Nation Worlds with nanomites that connect animate and inanimate matter to her network (Hopkinson 9). Later on, I will consider what these seemingly magical connections "feel" like, taking into consideration different levels of connection, through the perspectives of what Star would call standard members and nonstandard members of the network. Here, however, I will focus on the violence masked by the metaphor.

The poetic image of Nanny extending herself and sending out magical nanomite connections has a dark side. The "Earth Engine Number 127" drilled down into Toussaint, "like God entering he woman; plunging into the womb of soil to impregnate the seed of Granny Nanny" (Hopkinson 2). The process also entailed displacing threatening plants and animals to a shadow dimension. Based on these details, Jillana Enteen interprets Granny Nanny "as a violent, sexual conqueror that sows her seed [...and by] killing the indigenous flora and fauna spawns a domesticated environment solely controlled by [her]" (272). While this description stands out for its particularly strong language, the term colonization creeps into almost every analysis of the

novel. The term never appears within the pages of *Midnight Robber*, however, and the fact that Granny Nanny repeated the process of colonization that was inflicted upon the Caribbean by the West becomes the elephant —or rather the "mako jumbie bird"— in the room within the fictional universe of the novel.

Early on, the eshu uses fossils to teach the young protagonist about the animals that lived on Toussaint before "human people came and made it their own" (Hopkinson 32). This included animals domesticated for human exploitation, like the *mako jumbie* bird, and also the *douen*, "a lizard-like sentient species that is native to the planet," which was not only banished to the austere shadow planet but was even erased from Nanny's memory (Fehskens 145). "Indigenous fauna, now extinct," is all the eshu finds when he searches the 'Nansi Web data banks for more information (Hopkinson 33). These absences become all the more conspicuous when Tan-Tan finally encounters the *douen* on the shadow planet, and is forced to question everything she had learned—or not learned—about the species.

Several scholars have explored the significance of this encounter within the novel. Erin Fehksens focuses on the customs of the *douen* as well as Tan-Tan's process of assimilation into their world to the point that her "human features become strange to her" (146). Eric Smith suggests that the *douen* represent the "suppressed history of Toussaint, that which lies outside the range of its ideological field" (147). He furthermore points out that the warbles and chirps of the female of the species evoke nannysong, effectively connecting the two dimensions and, I would add, leaving marks of this suppressed history within the interface's very operating language. Finally, Leif Sorenson looks to the colonial violence inscribed within the discourse surrounding the encounter, from the science fiction trope of space colonization to the practice of naming and

classifying. The Marryshevites named the *douen* after a terrifying monster of Caribbean folklore, due to their "backward" knee joints, as the *douen* himself explains. When called a beast, the *douen* retorts: "Beast that could talk and know it own mind. Oonuh tallpeople quick to name what is people and what is beast" (Hopkinson 92). The *douen* are revealed to be "intelligent colonized entities," exposing the deliberate silences and discourses that were deployed to justify their dispossession (Sorenson 278).

In her homage to Star, Puig de la Bellacasa, reiterates that, "extension remains the beating heart of network thinking" while "ecological thinking is attentive to the capacity for relation-creation, to how different beings affect each other, to what they do to each other, the internal "poiesis" of a particular configuration" (52). The polyvalent interface of *Midnight Robber* lends itself to both forms of thinking. The Grande Nanotech Sentient Interface, and its personification as Granny Nanny, is a network marked by expansion, linkages and, as we have seen, blind spots. Yet the same interface is also known as the 'Nansi Web, a reference that evokes Anansi the trickster spider of the West African and Caribbean storytelling tradition. The narrator presents the novel as an anansi story and himself as a master weaver, a spinner of threads. The oral storytelling tradition is community-based, and although neither Tubman nor the reader can respond, the narrator opens and closes the novel with the traditional call and response —crick-crack—pulling the reader into his web, implicating them in the story being told.

Above all, it is the figure of the eshu, as narrator and master weaver, who spins the threads of the 'Nansi Web. In Hopkinson's own words, "The operating system that runs a dwelling is an "eshu," named after the West African deity who can be in all places at once, a ghost in the machine" ("Conversation"). The eshu of West African tradition is a polyvalent god.

Known as a "trickster," he is also "an essentially protective, benevolent spirit" who serves as a "messenger between heaven and earth" ("eshu"). Hopkinson's eshu serves as the messenger between Nanny and her users. It is also an operating system and a sentient computer program. The house eshu can see between dimensions. It has access to the perceptions of its users and to Nanny's quantum database. It is limited by protocols, yet displays a significant degree of autonomy. In the case of the spaces between, as we have just seen, the eshu appears to have knowledge of the *douen*, as he begins telling the young protagonist about them, only to come up empty when she prompts him to search for more information on Nanny's database. The true addressee of the anansi story told throughout the novel, Tan-Tan's infant son Tubman, receives a more complete view of the 'Nansi Web. Tubman learns of Toussaint, of its violent preparation for the Marryshevites, of its shadow side, and of the humanity of the *douen*. He finds himself immersed in the 'Nansi Web. He himself is a "weave in she web," and he gets a glimpse of how it is all interrelated. The eshu, as a blend of AI and the West African deity, provides this ecological perspective of the interface, by complementing depth and connection over extension.

3.3.3 Feeling Utopia Through the 'Nansi Web

In this final section, I study the sensations that the interface provokes for each person or group, and how these relate to the overall trajectory of the novel, from the Toussaint utopia to the enlightened cyborg ending. I will provide brief snapshots of four different perspectives: 1) Tan-Tan; 2) Tan-Tan's father Antonio; 3) the pedicab runners; and 4) Tan-Tan's son Tubman. Through the final snapshot, I also evaluate how the interface affects the formal qualities of the novel and how this implicates the reader in the cybernetic infrastructure of the novel.

Antonio and Tan-Tan: The young protagonist and her father are typical Marryshevites that live with nanotechnology as if it were a fact of life. They coexist with the sensors around them, the nanomites swimming through their body, the earbud that connects them to the interface, the clicks and nannysongs that run the program, and the audiovisual interjections within their "mind's eye." Yet despite these shared experiences, Antonio and Tan-Tan are diametrically opposed when it comes to their relation to the interface.

For Antonio, Nanny's omniscience is burdensome. He acknowledges that she protects the privacy of her users if there is no harm to life or limb, for example, in the case of the infidelities that both he and his wife carry out. Still, she is always listening, watching, and collecting information. The nanotechnology feels invasive; Antonio complains that, "A Marryshevite couldn't even self take a piss without the toilet analyzing the chemical composition of the urine and logging the data in the health records" (Hopkinson 10). He yearns for privacy. He is stunned when he is taken offline for the first time by one of the runners, and he is euphoric when he realizes that he has been banished to a life of hard labour without the benefits of nanotechnology. The demands placed on the citizens of the cyberutopia are clearly too high for Antonio. He delights in the lawlessness and chaos of the shadow planet that will allow him to do as he pleases.

In contrast, Tan-Tan finds the click that marks the eshu's arrival reassuring. For her, the eshu is not merely a personal assistant or personified search engine, it is a companion. When she whispers its name, it appears in her mind's eye to accompany her. Unsolicited, it soothes her with lullabies or distracts her with cartoons or stories when she is feeling down. In exile with her

father on New Half-way Tree, the eshu's absence is palpable: "No house eshu clicked on to greet them. It felt strange, wrong" (Hopkinson 128).

On Toussaint, the eshu serves as the link between the interface and its users, and this function allows it to make life more or less bearable for each individual. The house eshu that Tan-Tan and her parents share clearly dislikes Antonio. It fulfills his basic requests for information yet does so with hostility. In the following scene, Antonio calls home to ask for his wife. The length of the excerpt allows us to get a feel not only for the eshu's elaborate performances and perverse sense of humor but also for the sensations, both mundane and distressing, that accompany living with nanotechnology:

[...] Under his breath, he ordered his earbud to punch up his home. It bleeped a confirmation at him in nannysong, and his eshu appeared in his mind's eye.

"Hot day, Master," grumbled the house eshu.

Today the AI had chosen to show itself as a dancing skeleton. Its bones clicked together as it jigged, an image the eshu was writing onto Antonio's optic nerve. It sweated robustly, drops the size of fists rolling down its body to splash *praps!* on the "ground" then disappear. "What could I do for you?" The eshu made a ridiculously huge black lace fan appear in one hand and waved it at its own death's head face.

"Where Ione?"

"Mistress taking siesta. You want to leave a message?" (5)

The tone of the eshu's dramatic entrance ranges between insinuation and ridicule. The eshu is aware that Ione is with another man and chooses not only to lie but also to carry out an over-the-top performance directly onto Antonio's optic nerve. The rattling bones, cheeky attitude and enormous drops of sweat within his "mind's eye" come across as grating and exasperating.

This "hot day" dance is the antithesis of the house eshu's interactions with Tan-Tan. In one scene in particular, we get a feel for the gentle speech, the soothing tone, and the nurturing attitude that the eshu assumes toward Tan-Tan. The first time that she puts on her Robber Oueen dress, the eshu appears in her mind's eye as a little skeleton girl dressed just like her. As the young protagonist admires her costume in an ephemeral mirror created via nanotechnology, the eshu whispers "Belle Starr [...,] soft in her ear" and proceeds to tell her the story of Trini Belle Starr, the first woman to take on the traditionally male carnival role (Hopkinson 28). The eshu then tricks Tan-Tan's mother and nurse into letting Tan-Tan wear her new costume to the Jonkanoo festivities. When the adults notice the AI's deception, Tan-Tan's mother responds by proposing a synapse wash for the eshu, which presumes that the AI slowly gains autonomy from its protocols. It is unclear if this is a result of Nanny's coming to consciousness or a parallel process in which the eshu gains its own autonomy. What is clear, however, is that the interface guides Tan-Tan to adopt the Robber Queen persona, which later empowers her to scrutinize the cybernetic utopia, to stand up to corruption and cruelty on the shadow planet, and to overcome the personal traumas of her past.

The Runners: For the average Marryshevite, the clicks and chirps of the interface are a familiar if unintelligible component of their everyday lives. The runners, in contrast, have realized an in-depth, longterm study of nannysong that allows them to make direct requests of the interface without the intervention of an eshu. Despite this close interaction with Nanny, they choose to live in collective *headblind* houses, use *headblind* tools, and generally abstain from the life of ease that nanotechnology has made possible. For this reason, the runners stand out not only for their knowledge of Nanny and their abstention from the interface but also for the

physical consequences of this isolation. Through the perspectives of Tan-Tan and Antonio, the reader gets a glimpse of their conspicuous physical characteristics.

The runners have "massive" chests, "wide, rippling" backs, and "tree branch arms" (Hopkinson 6, 65). They also show signs of aging since they refrain from using nanotech cellular rejuvenation. Due to their appearance, they are dehumanized socially and physically. Tan-Tan perceives one runner's *leonine* features, *ugly fruit skin*, and *forlorn* expression; "He looked like everyone in the world had decided to stop talking to him" (Hopkinson 50, 65). Antonio goes so far as to describe another runner's "arms muscled as thighs, her thighs bellied with muscles" and to imagine her hand as a paw when he shakes it (Hopkinson 9, 12). Antonio tells the runner that "back-break ain't for people," suggesting that the nanotechnology that made manual labour obsolete through robotics and smart appliances represents a humanizing force (Hopkinson 8).

Life *without* nanotechnology comes across as difficult and isolating, yet these physical descriptions only tell part of the story. The reader learns that the runners claim it is their religious right to eschew the benefits of nanotechnology, and they have even passed along what could be considered a creation myth or origin story for the sentient interface. One runner recounts that Nanny was created as a "newborn adult" and that she had to learn, to "come to consciousness" (Hopkinson 51). When she became so complex that the programmers could no longer understand her, they planned to abandon the experiment but the "quantum brain" was able to save herself from erasure by communicating with the fabled programmer Marryshow via nannysong, a pared-down version of her tonal code.

As descendants of this programmer clan, the seemingly downtrodden runners occupy a privileged position within the cybernetic utopia. They are privy to information about Nanny that no other Marryshevite enjoys and, through their use of nanotech-free objects they enjoy privacy, "the most precious commodity of any Marryshevite" (Hopkinson 9). Finally, if they sing the right song, they are able to ask Nanny "to do things nobody else could even think of" (Hopkinson 52). In my reading, the runners are not merely outcasts that are tolerated by the much more powerful interface; instead, I suggest that the runner clan, as a self-proclaimed religious sect, evokes Rastafarianism. Through the knowledge that they share about Nanny, their subversive attitude, and their decisive role in the events of the novel, the runner clan helps to push beyond the static Toussaint utopia to the "utopian gesture" disclosed at the end of the novel.

Tubman: Tan-Tan's infant son is only formally introduced in the final lines of the novel. Tubman presents a radically different perspective. We learn that, once in exile on New Half-Way Tree, the nanomites in Tan-Tan's defunct earbud migrated to the growing fetus, turning his whole body into "one living connection with the Grande Anansi Nanotech Interface" (Hopkinson 328). After engaging with the existing criticism on this cyborg ending to the novel, I will turn to what I consider the most profound contribution of Tubman's perspective: The last-minute disclosure of the overall framing for the novel, in other words, the revelation of the non-human identity of the narrator who has distracted the cyborg infant from the pains of labor and birth with an anansi story about his mother Tan-Tan.

In her article "The Matter of Bodies: Materiality on Nalo Hopkinson's Cybernetic Planet," Erin Fehskens traces the trajectory from the disembodied sentient interface to the embodied cyborg infant. In her reading, "The program leaps beyond its dimension constraints,

engaging in a decade long rescue mission [...] In a flight of capital's desires to protect its investments, Nanny has literally directed her nanomites in the very blood of Tubman, preserving them (and herself)" (139, 151). Fehskens and others associate Nanny with the limitless expansion of late capitalism, yet they acknowledge that the Grande Nanotech Sentient Interface appears to go above and beyond any supposed self-preservation protocol. ³⁰ By allowing a human to perceive multiple dimensions —a human fatefully named Tubman in honor of the abolitionist Harriet Tubman— Nanny exposes herself to the unknown. At the end of the novel, it remains unclear what consequences the cyborg entanglement will have for Tubman, Nanny, Toussaint, or New Half-Way Tree.

As for the material limits —or lack thereof— of the infant, the eshu explains to Tubman that nanomites permeate all of his growing tissues, and that therefore he will be able to "feel nannysong," that his "little body string will sing to Nanny tune," that he "will be a weave in she web" (Hopkinson 328). For many critics, this cyborg configuration presents the true utopian gesture of the novel. Eric Smith suggests that "Tubman's Utopian promise" lies in his potential to perceive both the cybernetic utopia and its shunned prison planet in order to reassert "material history into closed social matrix of Toussaint" (160). Fehskens likewise notes Tubman's "mobility between spaces" but stresses the importance of his embodied perspective (153). As a cyborg, Tubman is not only networked but also grounded, grounded in his infant body, in the birthing process, and in the multiple forms of weaving that permeate the novel, including but not limited to the characterization of the interface as a spider web and the narrator as a weaver of anansi stories. For Fehskens, Tubman's perspective fuses the expansive network that flattens

³⁰ See Fehskens 2010; Enteen 2007; Smith 2009.

distance through links with the "woven object [that] encourages depth, doubleness, folding, and knotting" (153).

These interpretations of Tubman's utopian promise are mostly speculative, since it remains unclear how the infant will understand Nanny or the colonization of Toussaint, what actions he will take, or even where and how he will "live" (Smith 160; Fehskens 152). There are, however, other aspects of Tubman's perspective that have a tangible effect within the present moment of the novel. *Midnight Robber* is framed as the story of Tan-Tan, as told by her house eshu to her infant son to guide him through labor and birth. In the opening lines, both reader and infant are confronted by an unidentified voice referring to an unidentified process. Over the course of the novel, the mysterious voice introduces reader and infant to the worlds of Toussaint and New Half-Way Tree, exposing the echoes of colonization on the cybernetic utopia and tracing Tan-Tan's own process of coming to consciousness.

The position that Hopkinson places the reader in, first through confusion or intrigue, then through the normalization of the unknown voice, and finally by pulling back the curtain and revealing the identity of the speaker and addressee, potentially has a more radical effect than the idea of Tubman's posthuman perspective. The reader finds themselves intertwined with sentient AI and an infant in the process of being born, and this entanglement encourages several levels of reflection. First, the reader realizes that the narrator is a computer program. Second, the reader learns that they have accompanied a birthing process during the time that it took them to read the novel. Finally, both of these realizations cause the reader to do a double take of the novel they have just read.

One interpretation of the last-minute revelation of the narrator's AI identity is that the novel served as a Turing test, in which the eshu convincingly imitates a traditional and, by default, human narrator. In his 1950 paper titled "Computing Machinery and Intelligence," Alan Turing begins with the question "Can machines think?" which he discards as an impossible question, and instead proposes the "imitation game." The most fascinating aspect of the Turing paper for the purposes of this analysis is that he challenges how we define intelligence and learning. He received significant resistance to his concept of machine intelligence when it first appeared over 70 years ago. Leading writers, philosophers, biologists, and theologists questioned how free will, consciousness, emotions, art, and learning could possibly emerge from a binary code. Turing's rebuttals are helpful, not only to contextualize Hopkinson's technological speculation but also to understand the perspective of the reader.

Turing accepts that there is something mysterious and intangible about consciousness.

This is why the imitation game does not require machines to completely recreate the human experience, a task that would be difficult if not impossible to measure, but merely to give a convincing performance of some of the functions of human cognition. As a mathematician and computer scientist, Turing goes into detail as to how a discrete machine, that is, one that runs on binary code, could exhibit something that would simulate free will or even the process of learning. For example, he specifies that through a "conditional reflex" protocol, a machine could be programmed to adjust its rules when confronted with new situations. He furthermore proposes that, "Instead of trying to produce a program to simulate the adult mind, why not rather try to produce one which simulates the child's? If this were then subjected to an appropriate course of education one would obtain the adult brain (456)" Turing likens a child brain to a writing pad

that has little to no writing, that is, one that has few mechanisms for responding to the world. In his scenario, the programmer would undertake the role of the educator, accompanying the machine and developing new protocols to respond to its evolution. In *Midnight Robber*; this scenario comes to life in Nanny's origin story: "When Nanny get create, she come in like a newborn adult; all the intelligence there, but no knowledge [...] She had was to learn, she had was to come to consciousness. Them days there, the programmers and them had write she protocols in Eleggua, seen —the code them invent to write programs to create artificial intelligence" (Hopkinson 51). I propose that Turing's reflections also provide the key for understanding how the novel programs (or re-programs) the reader.

The reader unwittingly accompanies Tubman through labour, birth, and tutelage.

Throughout the novel, the eshu tells stories which provide the cyborg infant with mechanisms to understand the complex world(s) he is entering. This is a form of programming, along the lines of a conditional reflex protocol. As Turing explains, when AI learns, "the rules which get changed in the learning process are of a rather less pretentious kind, claiming only an ephemeral validity" (458). This presents a different approach to knowledge, one that encourages the questioning of established truths and promotes an open-minded yet critical attitude. The reader, as the narrator's addressee, occupies the same position as Tubman and therefore undergoes a metaphorical (re)birth and (re)programming. In this way, the reader may be prompted to challenge the protocols that previously guided their understanding of the world.

Leif Sorenson proposes that the reader arrives to a similar point of reflection due to the "technological aesthetics of dub" expressed through the novel (276). In his article "Dubwise into the Future: Versioning Modernity in Nalo Hopkinson," he explains that dub refers to a remix on

the B-side or dubside of a reggae LP. The dub mix introduces echoes of the A-side song before the original melody enters full force. These "sourceless echoes" disrupt listening and force the listener to chase the sound, searching for its source. In a similar way, "Hopkinson's reader chases the narrative," due to the fact that the nonlinear storytelling and the unusual framing of the novel "disrupt established narrative structures" (Sorenson 269). Sorenson concludes that as the reader leans into the narrative, they become more attentive to the contradictions of Western modernity that appear as "sourceless echoes" in the Toussaint utopia.

Scientific innovations made it possible for Granny Nanny to free her pan-Caribbean inhabitants from hard labor, violence, and servitude. Yet this utopia depends on surveillance, colonization, and exclusion, as evidenced by the shadow planet of New Half-Way Tree where any Marryshevite who committed a violent act and the supposedly dangerous autochthonous fauna of Toussaint eke out a difficult existence in exile. Antonio's perspective gives us a sense of the overwhelming surveillance and control. The runners demonstrate awe for the power of Nanny yet they choose not to participate in the utopia she has created. Finally, the eshu provides an education for both Tan-Tan and Tubman that does not hide these truths about the Toussaint utopia. It is this uncorrupted yet enlightened perspective that draws Nanny into new territory, literally and figuratively.

Quantum computing promises (or threatens) a perspective so expansive that it would be inconceivable to the human brain. Does Hopkinson project a quantum consciousness that will be able to transcend violence and global inequalities? Or destined to repeat them out of self-preservation? Are the echoes of colonialism on Toussaint due to the historical input Nanny received or the limited imagination of the programmers that created her? *Midnight Robber* does

not answer these questions, choosing instead to revel in ambiguity, contradiction, and an open ending.

3.4 Looking Backward and Forward

The two novels examined imagine a high-tech future for the Caribbean and, in this way, they challenge racist and colonial hierarchies that relegate certain regions of the world to a primitive past. We see Caribbean hackers, programmers, and inventors, as well as Caribbean futures that are completely integrated with space travel and sentient networks. Internet, quantum computing, and AI are infused with the history and culture of the Caribbean region. From the eshu virtual assistant or Granny Nanny, the seemingly benevolent surveillance system, in *Midnight Robber* to the sentient firewalls, the Yoruba pantheon, and the Taino deities in *Habana underguater*, these non-human characters shape the plot and narrative structure, guide the human characters, and provoke reflections about the human condition, morality, and justice.

Still, however, information technology does not usher in a placeless, raceless, bodiless utopia. *Midnight Robber* and *Habana underguater* expose the haunting of racism and colonialism within these high-tech Caribbean futures. In the words of Alondra Nelson, these novels "look backward *and* forward," asking "what was *and* what if" (4). They include explicit and implicit references to the history of colonialism in the region, they question the utopian potential of information technology, and they craft a critique of colonialism that transcends the circumstances of a specific historical moment or geopolitical configuration. *Habana underguater*; for example, draws attention to the island nation's vulnerable position within global power structures, whether domination is carried out by the US, the USSR, or transnational

corporations. The only glimpse of relief —the only possibility of sovereignty— appears in brief scenes that discuss the impact of locally built and owned infrastructures; specifically, an electrical plant in Santa Clara and quantum servers in Santiago. The critique elaborated in *Midnight Robber* is even more unexpected since it uncovers colonial violence at the heart of an Afro-Caribbean utopia. Hopkinson does not dismiss the possibility of a radically different future for the Caribbean. Instead, she draws our attention to the shadow world of a life of leisure and technological convenience. She questions the potential of utopia as a static, isolated community in favor of utopia as a process.

4. Between the Pledge and the Wake:

Inhabiting the Ruins of Unfinished Projects

The recent film *La obra del siglo* tells the story of the abandoned Nuclear City and Plant of Juraguá, Cuba. Directed by Carlos M. Quintela, with a screenplay by Quintela and Abel Arcos, the film portrays the tense cohabitation of three generations (a grandfather, father, and son) that share an apartment in the city that was built for the plant workers. Set in the year 2012, the scenes unfold in black and white against a backdrop of unfinished structures and failing infrastructure. Brief dialogues reveal family dysfunction, frustration, stagnation, and apprehension. These scenes alternate with clips of archival footage from the 1960s-1990s that paint a different picture of the "Project of the Century." Nuclear energy had the potential to electrify the countryside and free Cuba from dependence on foreign oil. Similar to the space race, nuclear energy was inextricable from the Cold War. Within the Cuban context, both pointed to a high-tech socialist future led by the Soviet Union. As the Soviet Union and socialist mutual aid fell apart in the early 1990s, the Cuban nuclear dream was put on hold. *La obra del siglo* portrays a ghost town in which the inhabitants struggle with what *is* while they are haunted by what *was* and what *could have been*.

At first glance, the 2012 novel *Aux frontières de la soif* by Haitian author Kettly Mars would appear to have little in common with a film about the Cuban nuclear dream. The novel, published a little over two years after the devastating Haitian earthquake, portrays the lives of those who lived on in the wake of the natural disaster. From the privileged cultural elite who chose to stay in Haiti to the multitudes that live in precarious conditions in tent camps, *Aux frontières de la soif* reveals frustration, desperation, impotence, and injustice. The narrative voice

shifts between characters throughout the novel, providing an intimate and painful view of the sexual violence committed by the protagonist and of the general breakdown in reconstruction. Canaan, whose name evokes the biblical promised land of milk and honey, is marked by the unfulfilled promises made by international humanitarian organizations and a lack of even the most basic infrastructure a year after the earthquake.

In both film and novel, the characters inhabit the wake of an unfinished, stalled or forgotten infrastructural project. Traces of international intervention also appear in both works. Whether through a bilateral agreement or a UN-sanctioned occupation, the international community intervenes to make promises, provide resources and personnel, control the direction of the project and, ultimately, step back and create a void that leaves individuals and communities to deal with pressing issues like safety, food, water, and employment. Why do these projects seem to be doomed for failure? What is the relationship between infrastructure and sovereignty in Caribbean nations? In this chapter, I explore colonial logic of development and the unsettling limbo that takes hold in the wake of an unfinished infrastructural project.

4.1 From Revolution to Underdevelopment

Following the 2010 earthquake, many Haitian and Haitian-American scholars have revisited "The Odd and the Ordinary," in which historian Michel-Rolph Trouillot explores the problem of Haitian exceptionalism. By no means discounting the singularity of the Haitian Revolution, Trouillot explains that exceptional, singular, and unique are malleable terms, lending themselves to a range of connotations and serving different purposes. For example, in the wake of the Haitian Revolution the newly formed nation was framed as an aberration by European

colonial powers and Creole revolutionaries that felt threatened by the possibility of black liberation. Later, the Duvalier regimes of the twentieth century would recast Haitian singularity as a source of pride. Finally, for many travelers and tourists Haiti has been the object of a fetish-like fascination for centuries.

Regardless of the positive or negative connotations, the idea that Haiti is different has obscured more than it reveals. Trouillot explains that, "When we are being told over and over again that Haiti is unique, bizarre, unnatural, odd, queer, freakish, or grotesque, we are also being told, in varying degrees, that it is unnatural, erratic, and therefore unexplainable. We are being told that Haiti is so special that modes of investigation applicable to other societies are not relevant here" (6). These comments were originally delivered as part of a keynote address in 1990, a moment of growing political tension in Haiti. The grassroots Lavalas political movement led by President Jean-Bertrand Aristide would soon be confronted with *coups d'état*, political splintering, unrest, and international intervention. Little relief would come over the next decades and, by the time of the 2010 earthquake, a large-scale UN political stabilization mission had been active in Haiti for years with minimal impact. As Trouillot did in 1990, today's scholars seek "new narratives" that go beyond the binary of revolution and crisis, that create new ways to understand Haitian history and culture, and that support the current task of reconstruction.

Cuba was also home to a revolution that changed the horizon of what was possible. Much like the Haitian Revolution, the Cuban Revolution constituted a threat for some, provoked fetish-like fascination for others, and inspired nationalistic pride for many. The extended crisis known as the Special Period in Times of Peace, which spanned the 1990s and the beginning of the 2000s, added another level of complexity, but did not radically change these narratives. The

Cuban government continued to enforce revolutionary discourse despite its inability to provide the social services it once guaranteed.³¹ At the same time, the United States doubled down on its decades-long embargo aimed to stifle the threat of socialism in the Americas. At the beginning of the twenty-first century, tourists flocked to the island to see a country seemingly suspended in time before it disappeared.

How does the Juraguá Nuclear Plant fit within this discursive limbo? I first heard about the curious story at an informal gathering organized by science fiction author Yoss while I was completing fieldwork in Havana in 2016. Yoss told us of an unfinished nuclear plant that was prime material for a work of science fiction. Although the project had been abandoned since 1992, scientists, workers, and their families still lived in the ghostly Nuclear City. I found the story unbelievable, yet the rest of the attendees assured me of Yoss's encyclopedic knowledge and his gift for telling strange but true tales. The conversation moved on before I could ask more questions but the story would stick with me.

In the weeks that followed, I tried to imagine what life was like there. I scoured my memory for inspiration. I pictured the rundown bungalows on playa Tarará just north of Havana, where I had heard that children from Chernobyl were lodged while receiving treatment for radiation poisoning. The government policy of quarantining HIV patients also came to mind. I recalled the story of *frikis* who had intentionally infected themselves at the height of the Special Period in order to receive food and lodging at AIDS clinics. Along these same lines, I conjured up the dream-like scenes of the remote sanatorium represented in the 1993 novel *Pájaros de la playa*. This web of illness, contamination, and otherworldly isolation was surprisingly confirmed

³¹ For a discussion of the socialist social contract in Cuba before and after the fall of the Soviet Union, see De Ferrari 2015, especially pp. 3-6.

when I returned to the US and found more information about the Juraguá nuclear plant in chronicles, essays, websites dedicated to denuclearization, and eventually *La obra del siglo* itself. Within the film, desolate landscapes and unfinished buildings simulate a post-apocalyptic landscape. At the same time, archival footage documents the ambitious construction project and fictionalized dialogue between inhabitants of the Nuclear City reveal nostalgia and nationalistic pride for the Cuban nuclear dream.

Both the nuclear dream in Cuba and the 2010 earthquake in Haiti are trapped within the conceptual frame of Cuban and Haitian exceptionalism, articulated through the binaries of revolution and crisis, hope and disaster. Following the suggestion of Trouillot, I seek to challenge the idea that Haiti and Cuba are incommensurable. Through the concept of development, I seek to highlight similarities with processes and power structures that have affected —and continue to affect—other countries in the Caribbean and the Global South. I ground my analysis in the representation of two stalled construction projects: the Soviet-backed Nuclear Plant in *La obra del siglo* and post-quake reconstruction led by the international community in *Aux frontières de la soif*.

Much like the concepts of progress or evolution that shaped the eighteenth and nineteenth centuries, development refers to a forward-oriented movement toward a desired outcome. As both a theory and a practice, it gained momentum in the wake of the Second World War, amidst anti-colonial and revolutionary struggles throughout the Global South and the geopolitical polarization of the Cold War. In relation to the former, sociologist Aníbal Quijano describes development as an attempt to decentralize and redistribute economic resources and political power. In relation to the latter, he acknowledges that it quickly become the expression "de la

magnitud y de la profundidad de los conflictos de interés político-social implicados en toda esa nueva geografía de poder y en América Latina en particular" ("Fantasma" 47). This ideological conflict was marked by modernization theory, led by the US, which advanced technological innovation, export-based industrialization, and insertion in the global economy, and a socialist model of development that promoted autonomy through import-substitution industrialization. These competing models were the focus of intense debates throughout Latin America in the second half of the twentieth century.

Development did not lead to a meaningful redistribution of economic or political power in the twentieth century, yet it continues to be an aspiration in the twenty-first century. Quijano addresses this paradox in "El fantasma del desarrollo en América Latina," unpacking the reasons why it has failed and will continue to do so in the region. His analysis circles around one of his major theoretical contributions: the concept of coloniality, or the racialized hierarchies resulting from the conquest and colonization of the Americas. Quijano questions the premise that technological or economic growth will spur improved living conditions or political stability in Latin America. He explores in detail how the rise of capitalism, the modern nation-state, class-based struggle, and democratization in Europe relied upon the exploitation of the people and resources of the Global South. He also notes the legacy of the colonialism embedded in local institutions and social relations within postcolonial Latin American societies. He points out, for example, that during the export booms of the late nineteenth century the white oligarchies hoarded power and resources. He concludes that the current models of development will

continue to concentrate power among the few and increase polarization in Latin American societies.³²

In *Humanitarian Invasion: Global Development in Cold War Afghanistan*, historian Timothy Nunan provides a nuanced analysis of how development (led by the US, West Germany, the Soviet Union, and European NGOs) decimated Afghan sovereignty, national identity, and political stability over the course of the twentieth century. He examines the ulterior motives, violent practices, and overwhelmingly negative impact associated with foreign-led infrastructural projects. For example, the Soviet Union caused intergenerational trauma due to the way in which it attempted to forge proletarian class consciousness: Soviet leaders built factories and entire cities from the ground up while strategically relocating workers, erasing local histories, and enforcing new cultural habits. Meanwhile, the US approached the Afghan desert as another Wild West to be tamed through epic irrigation projects and the forced migration and settlement of nomadic tribes who reminded US developers of "North American Indians" (Nunan 84). As if that were not enough, the Cold War conflict would devolve into a civil war that involved ten years of Soviet occupation as well as US and NGO support for the guerrilla resistance that would later give rise to Al-Qaeda.

Although it escapes the regional focus of this dissertation, *Humanitarian Invasion* adds nuance to the contextual and conceptual framework for this chapter in unexpected ways. To begin, Nunan elaborates a compelling critique of development across the political spectrum.

Despite the markedly different discourses employed in the name of socialism, capitalism, or

³² Quijano would later explore the principal of "buen vivir" as an alternative to development that emerged from indigenous political movements in Bolivia and Ecuador. El buen vivir challenges the coloniality of power (centralization of economic and political authority), being (racialized hierarchies) and knowledge (Eurocentrism) in significant ways, offering a path toward decoloniality See Quijano, 2006; 2014.

humanitarianism, he exposes an overarching logic and power structure. Agents of development are shown to act with little to no regard for the needs of the people on the ground, the local tensions, or the possible aftershocks of their actions. Nunan's work is part of a growing discussion about Soviet development in postcolonial Africa, Asia, and the Middle East that has yet to include Cuba. Through my analysis of *La obra del siglo*, I seek to contribute to this discussion. Specifically, I propose a reading that contextualizes the nuclear project within the context of the Cold War development of postcolonial nations and a long history of colonialism in the Caribbean.

Humanitarian invasion also reveals that Cold War infrastructural projects and twentyfirst century aid are part of the same trajectory. Nunan concludes that both Cold War
superpowers and transnational NGOs have had a similar effect, undermining national
sovereignty, political stability, and long-term change in Afghanistan. Haiti has faced similar
consequences from decades —and centuries— of international intervention. The Caribbean
nation is on the verge of collapse amidst nation-wide protests that were first triggered by the
withdrawal of oil subsidies from Venezuela in 2018. The subsidies were part of Petrocaribe, an
alliance aimed at supporting development in the region.³³ Haiti had been a member since 2008,
yet the financial gains have failed to materialize in public works or services, another issue that
has fueled the protests. Last but not least, pervasive discontent with post-quake reconstruction

³³ Petrocaribe is a unique example of promoting development regionally. Similar to Cold War development, however, it has been tied to geopolitical aims and has lacked effective long-term planning (ie, what happens when oil prices drop). As Venezuela entered severe economic and political crisis, its fulfillment of the agreement has been unreliable. I experienced the effects firsthand during field research in Havana in 2016, when oil shipments were delayed for months. Haiti has been the first country to stop receiving shipments indefinitely.

persists, especially as reports continue to surface of sexual violence committed against women and children at the hands of humanitarian workers.

Historian Wien Weiburt Arthus looks to abandoned Cold War projects in Haiti to understand what went wrong in the wake of the 2010 earthquake. Despite the outpouring of donations from foreign governments, Arthus notes that only 30% of the aid pledged had been delivered a year later. In his contribution to the post-quake anthology *The Idea of Haiti*: Rethinking Crisis and Development, he draws similarities between this situation and the Alliance for Progress. Established by former US president John F. Kennedy in the 1960s, this regional development program included a comprehensive plan to build infrastructure and stimulate economic growth in Haiti. The aid was never delivered though, and Arthus cites the perceived administrative weakness of the Haitian government; nationalistic pride that has caused hostility toward international intervention; political instability; and a lack of protections for private property and investments, as some of the reasons why. Finally, and most importantly, Arthus questions the political and economic motivations of the donors. In the end, Haiti was not seen as a necessary or reliable investment for the US to curb the spread of socialism. Despite the altruistic discourse of the Alliance for Progress, Arthus concludes: "the truth was that international aid did not serve a humanitarian purpose" (151).

In response to this last point, I propose the concepts of the pledge and the wake as a way to understand why and how development fails. The pledge or promise cannot address humanitarian needs. It does not instantly transform into housing, water delivery systems, or food. It does, however, have effects on the level of discourse. In many cases, the pledge alone can achieve the political or economic goals of the donor. In the case of post-quake reconstruction, for

example, the Interim Haiti Recovery Commission negotiated tax holidays for tourist installations, tariff exemptions for garment factories, wage suppression, and the privatization of public utilities in exchange for pledges. As Arthus notes, many times the funds were never delivered and, as portrayed in *Aux frontières de la soif*, even when they are available, they are channeled through private contractors like the protagonist Fito. In the novel, all pretenses of humanitarian goals are out the window when Fito's friend reassures him that he should not worry so much about carrying out his little contract to build housing for the homeless while there are others carrying off massive sums. The wake, then, is the affective and material atmosphere that follows the pledge, from corruption, profit, and geopolitical calculations to makeshift infrastructure, expectation, disappointment, and more. In the analysis of *La obra del siglo* and *Aux frontières de la soif* that follows, I explore what the pledge makes possible at the level of discourse as well as what the wake feels like for the intended aid recipients.

4.2 Shades of Thirst in Aux frontières de la soif

Following the 2010 earthquake, the problem of Haitian exceptionalism continues to be of great concern. Anthropologist Yarimar Bonilla argues that the earthquake even reinforced the "exceptionally tragic" mode of understanding Haiti and revived interest in Haiti's "astounding resilience" and revolutionary past (153). Bonilla argues that the post-quake suspension of sovereignty in Haiti should not be understood as exceptional but rather as ordinary, contextualized within centuries of European and North American political intervention in the Caribbean. Along these same lines, historian Millery Polyné seeks to demystify Haiti and to make visible "the invisible epistemological order" that uses Haitian singularity to justify

international intervention and excuse the failures of reconstruction (xi-xii). The "invisible epistemological order" is akin to coloniality as it has been explored throughout this dissertation. In this way, I suggest that it makes sovereignty a legal right for some nations and a fiction for others. It involves reconstruction efforts that are destined to failure because aid is not only —or not even primarily— about helping the victims and improving infrastructure.

In her post-quake chronicle, *Why Haiti Needs New Narratives*, anthropologist and artist Gina Athena Ulysse explains that those with extensive knowledge about Haitian history knew that, "no matter how well-meaning international efforts and developments, these were performances of progress that would ultimately uphold the status quo" (27). Political philosopher Peter Hallward similarly likens post-quake reconstruction efforts to international meddling in Haitian politics in the 1990s and early 2000s. In 2010 he anticipated that reconstruction would bypass the Haitian government, exclude the majority of the Haitian people, and reinforce the gap between the privileged and the impoverished (318).

The 2013 novel *Aux frontières de la soif* is produced within the same context as these monographs, essays, and chronicles. Through fiction it raises many of the same questions and concerns. The themes of child prostitution, thirst, and hunger seem to exploit the narrative of an exceptionally tragic Haiti. And indeed, Mars takes her readers to the edge. She exhibits desperation in Canaan. She accompanies a pedophile as he struggles with an existential crisis. She shares his lustful thoughts and actions in detail. Yet Mars does not allow these extremes to become enigmatic, exceptional or unexplainable. She contextualizes the highly charged and emotional events of the novel within the technical, economic and socio-political realities of

reconstruction. In the pages that follow I will consider how the novel represents the material and metaphorical aspects of thirst and reconstruction.

Through this analysis I seek to contribute to a growing conversation about *Aux frontières de la soif*. Literary scholar Martin Munro has noted that the novel focuses on the living, of all socio-economic classes, and on the present and the future. As part of a larger project about the role of literature following the 2010 earthquake, he draws attention to Fito's troubled relationship with writing. Alessandra Benedicty, also a literary scholar, has explored the concept of uninhabitability. She emphasizes Fito's search for belonging and meaning, and she explores how Mars humanizes Fito without condoning or forgiving his pedophilia. To build upon this conversation, I will draw attention to the complex fictional world that Mars creates. I will consider how physical objects —such as blue helmets, blue tarps, a tank of water, or a water purification tablet— reveal the breakdown of foreign-led reconstruction. I will follow the theme of thirst from life-sustaining physical need to abstract yearning. I argue that all of these factors form part of the ecosystem of aid that Mars lays out within *Aux frontières de la soif*, encouraging the reader to consider how and why reconstruction is failing.

4.2.1 Who Owns Haiti?

The concept of sovereignty is central to aid and reconstruction. Before I delve into the novel, it is important to define the concept in relation to Haitian history. The title for this section, taken from a recent collection of essays, thrusts us into the thick of the matter. The question is unsettling, not least of all since Haiti is an independent nation. The reference to "ownership" addresses the question of political sovereignty and also evokes physical possession, investment,

and economic gain. Editors Scott Freeman and Robert Maguire intended for the title to be provocative. They remind us that Haitian independence was not only a claim of self-governance but also a rejection of the very idea that one person could own another. After plantation owners had been dispossessed through force and the French army defeated, the first constitutions for the newly independent nation foregrounded both individual and state sovereignty. In his contribution to *Who Owns Haiti?*, historian Laurent Dubois sees a "fundamental relationship between Haiti's powerful demand for sovereignty though revolution and the consistent refusal of recognition and respect for that sovereignty" (16). In the two centuries following independence, Haitian sovereignty has been violated through diplomatic nonrecognition, gunboat diplomacy, overt military occupation and, more recently, the presence of UN peacekeeping troops, the proliferation of NGOs, and militarized aid.

There are several landmark definitions of sovereignty that inform the discussion about post-quake Haiti. First of all, there is the concept of sovereignty attributed to the Treaty of Westphalia of 1648. Westphalian sovereignty has become shorthand for international relations in which each state has authority over its internal affairs. It provided the foundation for the 1949 Charter of the United Nations based on "relations of a specific kind (with the problem of war occupying a central position) among actors of a specific kind (territorial, sovereign, legally equal)" (Osiander 266). Scholars have revealed that this concept has little to do with the political context of 1648. Instead, it is a myth shaped by the interests of the growing field of international relations in the nineteenth and twentieth centuries. Yarimar Bonilla confirms that a simple glance at the political topography of the Caribbean exposes the fiction of Westphalian sovereignty

(156). Westphalian sovereignty is not a universal value, but instead has been defended by and for some nations at the expense of other nations.

At the turn of the twenty-first century, there was a small but significant amendment to the charter that is of particular importance for Haiti. The Responsibility to Protect, passed in 2005, allows the international community to infringe upon state sovereignty in order to defend individual sovereignty (Kahn 140-1). It is under this premise of humanitarian intervention that the UN established the Haiti Stabilization Mission following the destitution and exile of president Jean-Bertrand Aristide. Known primarily by its French acronym, MINUSTAH sought to protect women and children in armed conflicts, to prevent violations of human rights, and to support the development of a state "based on the rule of law and an independent judiciary" (Resolution 1542). When the earthquake struck in 2010, MINUSTAH expanded its mission to incorporate recovery and reconstruction. Despite centuries of intervention in Haitian politics, the Responsibility to Protect provided a new discourse for international intervention in Haiti, with emphasis on security and stability in the name of human rights.

MINUSTAH post-quake recovery efforts focused on spaces frequented by foreigners and the elite —spaces that could be easily secured. Based on testimony from aid workers and scholars on the ground, Hallward explains that the most vulnerable populations were treated as a "source of potential danger rather than as people in need of assistance" (324). The presence of the US military explicitly reinforced the focus on security and containment and, in many cases, NGO workers shared this "relentless obsession with security" (Hallward 325). In the days and weeks following the earthquake, the Toussaint Louverture International Airport was occupied to facilitate the arrival of over 17,000 US troops while a US naval flotilla surrounded Port-au-

Prince to deter people from attempting to reach Miami by boat. Sociologist Mimi Sheller explains that this supposed 'humanitarian response' primarily benefited humanitarian workers, military personnel, and the Haitian and international elite. Paradoxically, it isolated and immobilized the 1.5 million people that were displaced by the earthquake. Weeks, months, and even years after the earthquake many of these people were still living in "highly dangerous and vulnerable conditions due to the lack of bodily security, sanitation, clean water and hurricane-proof shelter" ("Islanding" 188).

These details are the tip of the iceberg. Over the last decade, many scholars have explored the complexities of post-quake recovery and reconstruction in detail. With this brief overview, I want to stress that neither state sovereignty *nor* individual sovereignty have been respected in post-quake Haiti. What is the function of this fiction of sovereignty, then? And how is it related to international aid? Just like the promise of modernization or technological progress explored in other sections of this dissertation, I suggest that international aid is offered under the pretense of universality. It is implied that humanitarian investment by a sovereign nation will support the receiving country as it develops the infrastructure, stability, and institutions necessary to be recognized as a sovereign nation.

In my analysis of *Aux frontières de la soif*, I explore specific dynamics that fail within the aid ecosystem. I propose that they can all, to some degree, be traced back to this false premise of sovereignty. As we shall see, many times the pledge of aid alone is enough to achieve the desired political or economic benefits, as in the case of tax exemptions and wage caps granted for donation pledges that were never fulfilled.³⁴ For the aid that is delivered, there is also the

³⁴ See Hallward 2010, especially pp. 317-344; Arthus 2013.

problem of implementation. Here, a focus on security trumps the needs of the most vulnerable populations. Finally, it is important to follow the trajectory of the aid. In the case of post-quake Haiti, large contracts to build infrastructure, provide services or deliver food aid are typically awarded to foreign companies, NGOs, and local elites, effectively bypassing the Haitian government. In this maze of private contractors, who is held accountable? These concerns have been raised by numerous scholars and investigative journalists, yet it is difficult to convey the complex ecosystem of international aid in contemporary Haiti. Through fiction, I believe that *Aux frontières de la soif* is able to tell compelling stories, share multiple perspectives, and lay out the physical, economic, and political challenges.

4.2.2 Mirages, Casques bleus, and Tarps

The reader learns about the formation of Canaan in the first pages, through the perspective of Fito, as he approaches by car and then enters on foot. He situates Canaan just beyond Corail, the orderly camp set up by international soldiers. The informal settlement of Canaan climbs the barren hills. He describes Canaan as "la plus parfaite anarchie [...,] une agglomération chaotique de carrés en contreplaqué et de maisons-baches à dominante bleue, étampés de sigles internationaux" ("The most perfect anarchy [...] a chaotic agglomeration of plywood squares and tent houses, mostly blue, stamped with international acronyms"; Mars 14).³⁵ He explains how the settlement grew exponentially, spreading from hill to hill overnight. This outsider perspective is later supplemented by Golème, the man who runs the child prostitution network. As part of the first wave of hurricane victims to be relocated in the camps,

³⁵ All translations of *Aux frontières de la soif* are mine.

he understands the specific processes that shaped both Corail and Canaan. Through the use of metaphor, Golème gives the reader a sense of the powerful pull of the promises made by the international community. Through synecdoche, in which physical objects stand in for broader processes, the reader also gets an idea of the dissonance between discourse, practices, and the impact of international aid.

On the streets since a young age, one can imagine that Golème was in a precarious living situation at the moment of the earthquake. He was one of the tens of thousands of people that sought refuge at the Petión-Ville golf club. Also known as the "golf americain," we learn that the US military immediately took control of the site and persuaded many of the hurricane victims, along with the help of the local government and a philanthropic Hollywood actor, to move to Corail, the official camp for displaced people (Mars 93). They were promised that their basic needs would be met, specifically through access to potable water, health care, schools, and even opportunities for work at a factory proposed by investors. None of this materialized, however, and the promises faded away like the apparition of water in the desert: "L'eau potable, les écoles, le dispensaries et l'usine étaient des mirages qu'ils verraient peut-être surgir de la poussière et du soleil" ("The potable water, the schools, the clinics, and the factory were mirages that they saw rise out of the dust and sun"; Mars 93). Golème describes setting foot in Corail as more jarring than the earthquake itself.

The desert mirage generates an intense and easily recognizable affective scenario of desperation, hope, deception, and disillusion. The metaphor gains even more emotional weight through references to the biblical exodus of the Israelites. Golème describes a daily exodus of hurricane victims that are searching for the milk and honey of the promised land (Mars 94). In

the post-quake twenty-first century settlement of Canaan, the hurricane victims do not find the metaphorical abundance of flowing milk and honey. Nevertheless, thousands of people settle there each day, staking out their plots with wood posts and blue tarps. Curiously, Canaan was neither a literary invention by Mars nor a hopeful toponym assigned by its occupants but rather the pre-quake name of an unoccupied stretch of land on the outskirts of Port-au-Prince. Mars develops the biblical association through the metaphor of the mirage, evoking the trope of thirst and immersing the reader in a complex affective scenario of perception and deception, weariness and excitement, hope and disillusion.

This metaphor fits within the register of Haitian exceptionalism. While this register conveys the extreme situation faced by the hundreds of thousands of displaced people, it does not illuminate how or why the breakdown in reconstruction occurred. In *Aux frontières de la soif*, however, Mars works on multiple levels. Golème speaks not only of the mirage but also draws our attention to specific objects that stand in for the broader failures of reconstruction: the ubiquitous UN logo and the equally pervasive blue tarps.

The UN logo —present on jeeps, buses, and the iconic light blue helmets— serves as synecdoche for the UN stabilization mission (MINUSTAH) and, more broadly, for the international presence in Haiti. There have been numerous studies and monographs examining the impact of NGOs, of the US military, and of MINUSTAH on post-quake recovery and reconstruction. My intervention considers the impact of macro-level decisions on the individual as represented within a work of fiction. Along these lines, I return to the basic argument set forth earlier in this chapter: MINUSTAH prioritized security and stabilization before, during, and after the earthquake. How does this make itself felt within the context of the novel? For Golème, it

feels like surveillance and hostility in lieu of a socially responsible camp with housing, infrastructure, and opportunities for work and social reintegration. He feels the eyes of the soldiers who follow all of the comings and goings of the inhabitants and the threat of their automatic rifles peering down from the top of the UN jeeps, ready to fire at any moment. The UN logo, inseparable in this scene from the weight of surveillance and the threat of the rifles, represents the emphasis on security at the expense of the well-being of the hurricane victims. Golème compares the atmosphere to Babylon, suggesting that MINUSTAH and the international community are part of a global system that has oppressed black populations throughout history.³⁶

Golème flees this oppressive climate and seeks refuge in the unofficial settlement of Canaan. The stark contrast between the surveillance of Corail and the anarchy of Canaan leads Golème to establish a child prostitution network which not only eludes the institutions that promise to protect human rights and impose order but in fact counts them among its clients: Golème boasts of an extensive network that implicates NGOs, international businesses, the UN peacekeeping mission, Haitian ministries and government offices, local elites like Fito, and international tourists. Through Golème's perspective, we get a glimpse of the scandals that plagued the post-quake UN mission, including "a record number of cases of sexual exploitation and abuse" and, as revealed later on in the novel, a cholera epidemic triggered by UN personnel (Di Razza 3).

³⁶ Jamaican Rastafarianism contextualizes black liberation within a series of concepts related to the oppression of the Israelites, such as the Babylonian captivity, the Exodus, Zionism, and the Promised Land. Babylon refers to the global system of oppression that has dispossessed black Africans and the African diaspora. Finally, Rastafarianism replaces the concept of "oppression" with "downpression" to denote that those in more privileged positions hold down those below them. See Bogues 2003; Chevannes 1980.

Through occasional but strategically placed references to the blue helmets and the UN logo, Mars invites us to reflect on the motives, practices, and impact of the international community in Haiti. The tarps that pervade the novel are less subtle. They do not leave room for reflection or debate; rather, they serve as a physical reminder of the breakdown of reconstruction. While tarps may be the quickest way to provide shelter following a natural disaster, they are not intended to serve as permanent or even transitional housing. Within the present moment represented in the novel, a year after the earthquake, the tarps signal the failure of long-term planning and support. In many cases, contracts were awarded to NGOs and private contractors. Within the novel, Fito is one of those private contractors.

Through inner monologue, Fito reassures himself that he set out with the best of intentions to design and build permanent housing for those displaced by the hurricane. He personally interviewed the displaced populations about their lifestyles, their needs, and their expectations for their new homes. The project stalled, however, and Fito identifies the problem of land titles as the cause. We learn in the novel that the government declared the camps public utility before it had resolved the issue of land ownership. Peter Hallward explains that despite the declaration of a state of emergency and the transfer of authority to a bilateral recovery commission (IHRC), this commission did not use its exceptional powers to expropriate the land for public utility. Instead, the IHRC protected the interests of the landowners (Hallward 338). Within the novel, Fito feels trapped between the inability of the state to secure the land titles and the demands of the donors for legal documentation in order to disperse funds.

The Haitian State and the donors form part of the aid ecosystem in the fictional world created by Mars. Other aspects of this ecosystem are also mentioned by the characters as causes

of the breakdown in reconstruction. Fito's friend Franck attempts to reassure him that corruption is the status quo. While others are making off with armfuls of money destined for reconstruction, Fito worries too much about respecting his small contract to build a few hundred houses. Gaelle, on the other hand, directly accuses her soon-to-be ex-boyfriend of profiting off of the misery of others. When Fito brings up bureaucracy, corruption, delays, his dedication to his country, his depression, etc., Gaelle becomes enraged. She responds by saying, "Reconstruction, mon cul! Je ne veux plus te parler" ("Reconstruction, my ass! I haven't seen you do anything but talk"; Mars 70). These dissonant comments from Franck, Fito, and Gaelle implicate the broader ecosystem of aid, its structures, and actors. Ultimately, the comments also point to Fito's own moral failings.

Last, but not least, the tarps stand in for the unspeakable. They play an integral role in the sexual exploitation and abuse of children in Canaan. On the most immediate level, the tarps offer little physical protection or privacy. They signal vulnerability. For many of the young girls, *going to the tent* becomes a euphemism for sexual abuse. An unnamed girl confesses: "Nous les filles, on a toutes peur d'aller sous la tente" ("We girls are all afraid of going into the tent"; Mars 86). The unnamed girl is likely Louloune, the seventh girl offered to Fito. As she knows she will soon be set to the tent, she decides to flee Canaan, while the twins Roseme and Esther do the same to avoid being sent back to the tent. Finally, twelve-year-old Ketia withstands the encounter with Fito but in her imagination she is transported far away from the tent through a story.

In this section, I have explored the breakdown in reconstruction represented in *Aux* frontières de la soif through a series of literary figures. The compound metaphor of the promised land and the mirage has revealed the range of emotions and affective responses to the promises made by the international community. A focus on the representation of specific objects, such as

the UN logo and the tarps, illuminated a fragmented post-quake response in which organizations, officials, and individuals act in ways that jeopardize the humanitarian objectives of reconstruction. By paying attention to these objects, I have drawn attention to the overemphasis on security that immobilizes the hurricane victims and the subcontracting culture that leads to financial gain with little oversight. Finally, these paradoxes provide room for corruption, graft, and sexual exploitation, which in turn further degrade the aid ecosystem.

4.2.3 The Price of Thirst

Thirst has material, physical and psychological connotations within the novel. On a material level, thirst marks the absence or breakdown of physical infrastructure and draws our attention to the material and relational components that condition access to drinking water. Buckets, tanks, tanker trunks, wells, and water purification tablets form part of a makeshift infrastructure that relies upon the labor of engineers, aid workers, charities, and the inhabitants of Canaan. Thirst also functions on a abstract and affective level throughout the novel, signifying desire, necessity, unease, and a search for meaning or relief. All of the characters are affected in some way by thirst yet the type of thirst they experience highlights their differences. While Ketia wishes for a story "à la mesure de sa soif" to comfort her as she is sexually abused, Fito couches his existential and moral crises in alcoholism, lust, and the transformative power of the sea ("the size of her thirst"; Mars 117). In this section, I consider the polysemic nature of thirst through the perspectives of three different characters: Medjine, Ketia, and Fito.

The lack of water infrastructure and the association between water and money is explicitly laid out in the first pages of the novel. An extended quotation is useful here to contextualize the subsequent references to drinking water that I will consider.

Une ONG cherchait de l'eau et promettait l'installation d'un système d'adduction qu'on attendait depuis plusieurs mois. Entretemps, il fallait acheter le précieux liquide. Au début, quelques camions-citernes commandités par des organisations caritatives venaient déverser leur réservoir dans les seaux et les *drums* du peuple. Une lutte s'engageait alors où les plus forts gagnaient la plupart du temps. Une eau qui ensuite était découpée comme des petites pièces de lard et revendue au prix fort. À Canaan tout avait un prix, l'emplacement de terre spoliée, l'eau rarissime, la quincaillerie, les soins de beauté, le pain, l'Internet, l'improbable sécurité, la marijuana et les boules de crack, le sexe sous toutes ses formes.

An NGO was looking for water and promised the installation of a delivery system but months later it still had not happened. In the mean time, it was necessary to buy the precious liquid. At first, some tanker trucks sponsored by charities would come to dump water into the buckets or barrels of the people. A struggle ensued in which the strongest won the most time. The water was then split up like small pieces of lard and resold at a high price. In Canaan everything had a price, the plots of spoiled land, the hard to come by water, building supplies, beauty supplies, bread, Internet, unreliable security, marijuana and crack bowls, sex in all of its forms. (Mars 15)

The promised infrastructure never arrives and the intermittent humanitarian aid triggers a fight in which the strongest take the largest portion. Ultimately, the inhabitants of Canaan must buy everything at a premium, from water, bread, and land to toiletries, building supplies, and protection. Within this 'free market,' drugs and sex become currencies as well. One of the most striking lines of the novel summarizes this precarious situation: "la chair tendre se vendait aux prix de la faim et de la soif" ("Tender flesh was sold at the price of hunger and thirst"; Mars 94).

There are several conceptual maneuvers within this metaphor. The girls themselves disappear; they become flesh, meat to be sold on the market at a premium. Within the novel the price is set by supply and demand, as we see through the increasing prices that Fito pays for the

younger and younger girls that Golème finds for him. In the metaphor, however, price is not tied to supply or demand but rather to hunger and thirst. In other words, the emphasis is placed on the context in which the exploitation takes root. In the following pages, I will explore this context through references to daily routines for securing food and water and the destabilization of family life. A dark fairy tale embedded within the novel further reveals the ethical and emotional toll on the young girls. Finally, I consider thirst and water-based imagery throughout Fito's moral crisis and redemption.

Medjine: Time is relative within the novel. The narration slips between present and past. In several cases, an omniscient narrator revisits the same moment several times to reveal different perspectives. Through these multiple perspectives, it is clear that time is not experienced the same way by each character. Fito and Golème keep close track of time. They are punctual. For them, time is money. For an hour in the tent, Golème gets a hefty sum in US dollars and Fito loses himself in an hour-long delusion. The young girls that are exploited by both men do not have the same privileged relationship toward time or money. Their youth, their body, and their innocence have become a currency. In exchange for an hour in the tent, their parents or guardians receive a small sum of money and perhaps some extra food. Throughout the novel, Fito's perspective is countered through interventions by the other characters. This narrative structure provides a more complete view of the challenges and failures of reconstruction while it reveals different ways of experiencing time, money, and necessity.

Leading up to the encounter between Fito and Medjine, the reader gets a glimpse of Fito's daily routine as it relates to reconstruction. He is angry and anxious due to a series of

inconveniences: broken air-conditioning, a sick secretary, a scuff on his jeep. He is annoyed that he has to waste more time at the Ministry of the Environment attempting to get the last signature he needs to dig a well in Canaan. He counts the weeks and hours of wasted time. Finally, that afternoon he has agreed to share his expertise on anti-seismic construction at a public meeting. He finds the time (Friday afternoon) and location (in Canaan) inconvenient. He is irritated by the pretentious NGO representative. In turn, both Fito and the NGO representative are annoyed by the disorganization, lack of punctuality, and impromptu cultural interventions by the young participants. As it is a Friday afternoon, Fito is counting the minutes until he can leave for Canaan.

Once in Canaan, Fito notes that Medjine was clearly "born to be a whore" (Mars 148). As the narration shifts to Medjine's perspective we learn that she discovered she was made to give pleasure at a young age and that she even lied to Golème about her age so that she could participate in his lucrative child prostitution network. After she lost her mother and oldest sister in the earthquake, Medjine is determined to support her surviving sister and young nephew. Of particular interest for this chapter is the calm, pragmatic, and self-possessed way in which she navigates daily life in Canaan.

Standing outside her tent, Medjine leans her head back to drink the last drop of coffee. She lights a cigarette from an ember of a makeshift hearth. As she enters her tent, she dumps a purifying tablet into the gallon of water resting on the ground. This detail draws our attention to the tedious and expensive task of securing potable water on a daily basis. The purification tablet represents an extra step, more time and effort invested to avoid falling victim to the devastating cholera outbreak. Medjine then recalls that she had to wait in line for two hours the day before to

receive powdered milk, flour, and sugar from Bread for the Hungry. In sharp contrast to Fito's palpable anger over wasted time, Medjine stops to enjoy the scent of cinnamon that fills the tent as porridge cooks over the fire. She is motivated to carry out these tasks, and whatever is necessary, in order to provide for her young nephew and to pursue her dream of becoming a midwife. Her time and effort are valuable because they are linked to her community. In addition to the stark contrast of privilege and entitlement, these two scenes reveal a more complete view of reconstruction, from the bureaucracy that prevents Fito from digging a well to the daily investment of time and effort to secure food and water.

Ketia: The first Friday night that Fito went to Canaan, he had Ketia (Mars 113). He remembers that he could sense her fear and innocence in her apprehensive body language. As Fito becomes excited, the narrator shifts to Ketia's perspective. Despite her innocence, she is aware of the harsh realities of Canaan. She and her sister have been going into the tent for many months. Since her mother lost her leg and several fingers in the earthquake, the two girls must provide for their younger siblings. Ketia knows where to touch the old men to make them finish quickly. She is aware of the price of hunger and thirst, both the abstract price that she delivers with her body and the literal price, five gourds a bucket. The following excerpt captures the disconcerting reality for the twelve-year-old girl: "Ella posa sa petite main sur son désir, pour finir vite et aller écouter les histoires effrayantes de la veille Viola derrière la citerne du pasteur Sarrazin qui achetait l'eau par camion-citerne et la revendait cinq gourds le seau" ("She placed her small hand upon his member, in order to finish quickly and go listen to old Viola's scary stories behind the water tank that belongs to pastor Sarrazin, who buys water from the tanker

trucks and resells it at five gourds the bucket"; Mars 115). Through these details, Mars contrasts the unwilling sexual act performed by a young girl with her childlike eagerness to hear a story. The young girl is painfully aware of the logistics of water distribution. The local religious organization is added to the list of those that are in a position to benefit from the lack of public infrastructure.

In the next chapter, the reader is swept back into the tent, reliving the encounter through the perspective of Ketia, who quickly invokes Viola to take away from Canaan. The low and raspy voice of the mysterious old woman materializes within the tent and the narration passes to Viola, who tells Ketia the tale of an evil stepmother who trades her soul, and eventually her stepdaughter, for precious stones. The young stepdaughter named Udovia is sold to the village jeweler, who is said to have an evil genie behind his right leg that feeds off of fresh flesh, with a preference for the flesh of young children. The dream-like narration flashes back and forth between Udovia, as she struggles against the genie, and Ketia, as she is molested by Fito. Within the story, Udovia overcomes the jeweler with the help of an old woman. Ketia returns to the present moment as Fito leaves the tent and the scene concludes for the second time.

Through analogy we are left with a disturbing portrait of the prostitution network.

Precious stones take the place of water, an association supported through the characterization of water as precious, rare, and valuable throughout the novel. The stepmother evokes many of the post-quake guardians, who seem to have little emotional connection to the orphaned girls they have taken in. Golème is the jeweler, whose profits increase as he delivers young flesh. Finally, Fito is the evil genie, along with the other aid workers, UN soldiers, tourists, and government officials that form part of Golème's underground network. Although Mars explores Fito's guilt

and Golème's traumatic childhood at other points of the novel, humanizing these characters to some degree, this dream-like sequence allows the author to indulge in the fairy tale model of good and evil, reminding us that nuance, intention, and moral struggles are of little importance to the children that experience violence at the hands of adults.

Fito: Of thirty-seven chapters, eight assume the perspective of the secondary characters. In addition to the scenes dedicated to Medjine and Ketia, there are chapters narrated from the perspective of unnamed children, of the mother of one of the girls, as well as Gòleme and Tatsumi, a visiting literary scholar and love interest for Fito. In her analysis of the novel, Alessandra Benedicty argues that, "the other voices serve as sub-portraits that frame, reframe, and recast the principal male character" (109). I argue that the polyphonic nature of the novel goes beyond simply countering the experience of the protagonist, as I have illustrated through an analysis of two of these voices and the overall affective, material, economic, and political setting. Still, it is undeniable that Fito's moral crisis is the unifying narrative thread of the novel. In this final section, I explore thirst as a metaphor for yearning, in both a sexual and an existential sense. Fito's abstract thirst appears alongside Ketia's thirst for comfort, her comments about the pastor who profits off of their need for water, and Mediine's mundane routine to secure food and drinking water. In this way, thirst connects the characters in an affective and conceptual web that suggests that they are all part of the same community while it highlights inequality and abuses of power.

As Fito is headed to his seventh encounter, with the virgin Louloune that Golème has found for him, he has a nervous breakdown. Minutes before his arrival to Canaan, he snaps out

of his addiction-driven, guilt-ridden stupor and he makes arrangements for a getaway to Abricots with Tatsumi, a literary scholar and journalist visiting from Japan. The calming sights and sounds of the sea occupy his mind during the drive. Nevertheless, when he arrives to the beach it seems that the ocean and the wind will hold him accountable for his actions. He yearns to let go yet his body is tense: "Il devait s'ouvrir au vent, aux nuances de bleu, étendre ses ailes anklyosées" ("He had to open to the wind, to the shades of blue, to spread his stiff wings"; Mars 112). The water burns his ankles and the endless blue sky and sea seem to crush him. His flashbacks begin. In addition to the flashbacks about Ketia and Medjine, Fito is also disturbed to see a young girl on the beach that looks like Fabiola. And finally, Louloune, who was to be his seventh victim, materializes in a dream about fishermen. To understand this intense experience with the ocean, I propose a reading that takes into consideration the influence of two water *loas* of the Haitian Vodou tradition, Lasirenn, queen of the sea, and her husband, Agwe Tawoyo, "admiral of the ocean currents." with power over the ocean and the wind (Tinsley 154; Anderson 2).

Agwe is linked to sailors, fisherman, and boats while Lasirenn is a mermaid, one of the female deities who represent "love, sexuality, prosperity, pleasure, maternity, creativity, and fertility" (Tinsley 4). Like the other *loas* of the Rada family, Agwe and Lasirenn are associated with healing and guidance. This context provides insight for Fito's disturbing dream, which begins as a small boat approaches the shore. Within the dream, two young fisherman unload an enormous yellow-finned bonito fish. Fito approaches to take a picture with an old Polaroid camera. Once the picture is revealed, he is horrified to see that it is not a fish but Louloune lying on the sand with a harpoon piercing her mouth. The horror increases when he notices that the fishermen have become Golème and his assistant, who now sneer at Fito from the polaroid

picture within his dream. Their laughter fills the ocean. Similar to the effect that the story about the precious stones has on the reader, the dream forces Fito to see the impact of his actions without any nuances or justifications.

In her article, "Sea Secret Rising: The *Lwa* Lasirenn in Haitian Vodou," Ursula Szeles explores the characterization of the siren who, armed with a mirror and comb, encourages self-reflection. Through a close reading of the religious symbols associated with Lasirenn, Szeles concludes that, "Lasirenn allows for introspection beyond time and space, hastening the process of rebirth of a self whose identity incorporates into a whole the often disparate ways a person behaves, sees herself, and is viewed by others" (205). The dream, the flashbacks, and the visions no doubt trigger such a process of reflection in Fito. Nonetheless, it is a conversation with Tatsumi that pushes him to complete the process of rebirth when she encourages him to tell the story of the young girls in Canaan.

After this conversation, Fito heads to the sea again. His final swim is radically different from his first encounter with the sea. The immense ocean and thick dark night accept him. He swims deep out to sea. He finally feels liberated when he decides he will accept the responsibility of telling the story of Canaan. While Agwe Tawoyo provided the initial direction, I believe that this final scene is a sort of baptism or rebirth guided by Lasirenn. The playful and sexual *loa* accompanies Fito as he returns to the room and makes love to Tatsumi: "La mer dansa dans les reins de Fito, il était encore dans l'eau, il était l'eau" (Mars 162; The sea dances in Fito's waist, he was still in the water, he was the water). Fito has satiated his existential thirst. He acknowledges his actions and he is ready to move forward. He will write again. He feels desire for other adults again. He is at peace in the ocean. Although Fito never admits his actions to his

friends, the final line of the novel infers that Fito has written *Aux frontières de la soif*, meaning that he has truly seen himself. He does not shy away from exploring the impact of his actions. He attempts to give voice to his victims, and he acknowledges that there are shades of thirst.

In *Aux frontières de la soif*, Mars represents a post-quake Haiti that contextualizes multiple perspectives within the broader ecosystem of reconstruction and international aid in Haiti. I concur with literary scholar Martin Munro when he states that the novel is interested in the "present and the future, in reconstruction and potential salvation" (Munro 133). In this reflection on shades of thirst, however, I have proposed another way in which *Aux frontières de la soif* accomplishes this difficult task. I suggest that Mars identifies the material conditions, social relations, and metaphors that limit reconstruction.

4.3 Soviet Technology on Cuban Soil in La obra del siglo

In a speech in the year 1920, Vladimir Ilyich Lenin proclaimed that, "Communism is Soviet power plus the electrification of the whole country." *Soviet power+electrification* is not merely an effective slogan, it conveys a belief in the utopian potential of technological progress. For Lenin, the path to communism combined industrialization, which would require the electrification of the countryside, with the political organization of the masses into soviets or councils. Cultural critic Lisa E. Bloom explains that, "the point was not simply to put the Soviet leadership in charge of electrification (and, later, nuclear expansion) but to give power to the living labor of the worker in producing new technological systems" (224). It is difficult to summarize the accomplishments and the failures of Soviet technological and political development in the years that followed. By the end of the twentieth century, however, the "Soviet

vision of progress" had definitively lost steam following the nuclear disaster at Chernobyl in 1986 and the political dissolution of the Soviet Union culminating in 1991 (Bloom 224). For Bloom and many others, the ruins of Chernobyl and the nearby ghost town of Pripyat stand as a haunting reminder of the limits of the Soviet technological dream.

As early as 1953, Fidel Castro recognized the potential of the budding field of nuclear energy to achieve the social transformations promised by the revolutionary forces. In his famous speech, La historia me absolverá, a young Fidel Castro states that nuclear power has the potential to deliver electricity to every corner of Cuba and thus support the goal of providing a dignified home for every Cuban family. It is a small detail in the nearly four hour speech, yet it marked the beginning of what became known as el sueño nuclear cubano; a dream that took shape in 1973 when Cuba and the Soviet Union signed a bilateral agreement to build two nuclear reactors near Cienfuegos, Cuba. The project required a monumental investment of labor and resources. A generation of Cuban scientists traveled around the world to gain expertise in nuclear engineering. Skilled and manual laborers moved to the isolated location to work on the ambitious project that would provide electricity for the Cuban people. The Soviet Union provided materials, financial investment, training, and scientists. Thus, when the dissolving Soviet Union changed the terms of their investment in 1992, Fidel Castro explained that Cuba alone could not maintain the project. With the first reactor at 90% completion, construction was halted indefinitely. As a severe economic crisis took hold in Cuba, scientists and laborers from both Cuba and the Soviet Union lived on in the ruins of the Project of the Century.

La obra del siglo is haunted by the socialist utopia that never came to fruition and, at the same time, by uranium that never arrived and a nuclear disaster that never occurred. Through the

combination of archival footage and black and white narrative scenes, the film explores both political discourse and affective attachments to what *was* and what *could have been*. In the following analysis, I will examine the impact of Soviet investment in Cuba through the frame of development. First, I explore the relationship between technological progress and imperialism. Then, I consider the limits of development through references to Soviet leadership on the project, ominous oversights throughout the construction process, and the ultimate suspension of the projects. Finally, I interpret the lingering threat of nuclear disaster within the film as a trace of the colonial logic of Soviet development.

4.3.1 A Cuban in Space

The title sequence of *La obra del siglo* makes multiple temporal jumps in a mere seven minutes. Green text accompanied by a high-pitched whir evokes early computer technology in the opening scroll. The viewer learns that the Soviet Union and Cuba signed an agreement to build two nuclear reactors near Cienfuegos, Cuba in 1976 and that the film that follows takes place in the Nuclear City built for the workers. The first temporal and spatial jump takes the viewer to archival footage that provides a bird's eye view of the completed city. Desaturated shades of green, grey, and beige date the footage to the 1980s. Accompanied by the fast-paced beat of a helicopter, the camera pans over Soviet-style apartment complexes and empty plots. Then, another jump occurs as the sequence switches to a high definition black and white shot of the interior of a modest apartment. In the lower left-hand corner, the same green text situates the scene inside the Central Electro-Nuclear (CEN) in the year 2012. An old man answers the door and reluctantly allows two fumigators to fog his apartment.

Within the present moment of the film, a conversation between the head fumigator and the old man transports the viewer to yet another moment: the space race in the early years of the Cold War. The fumigator expresses nostalgia for this epic moment in history, which he describes as a competition between Russia and the US, "para ver quién la tenía más grande," a metaphor that is revisited in a literal sense later in the film (00:04:10; 01:24:00). His wistful musing is accompanied by triumphant music and archival footage of the first manned flight to space by Soviet astronaut Yuri Gagarin on April 12, 1961. The viewer gets a glimpse of a beaming, young cosmonaut, first in his spacesuit inside the rocket and then celebrating on land amidst hugs and kisses with male comrades. The fumigator admires his beauty and smile. He highlights his audacity in the face of the unknown. It is implied that the "época que tenía épica" was marked by youth, beauty, brotherly love, and nothing less than pushing the limits of humanity (00:04:03).

The archival footage seems to preserve a moment in history. Inserted within the film, it allows the viewer a glimpse into the shared memories of the characters. The present moment of the film assumes quite a different relationship to the medium. Time and space blur together in a dream-like sequence. The fumigator draws the old man's attention to the clouds of pesticide rising out of the bottom of a nearby high rise: "Mira, parece un cohete despegando [...] A mí me hubiera gustado ir al cosmos. ¿A usted no?" (00:05:13-00:05:24). The old man smiles as he looks off into the distance with a smile on his face. His gaze fades away to upbeat music and yet another intervention by archival footage of Arnaldo Tamayo Méndez, the first (and so far only) Cuban to go to space. Finally, the sequence cuts back to the high rise/rocket ship as a voice over counts down in Russian. The sequence closes with the team of fumigators walking through clouds of smoke. Reinforcing the dream-like nature of the sequence, the lead fumigator is

simultaneously chatting with the old man, overlooking the high rise, and leading the team of fumigators in what appears to be the basement of the high rise. The experimental nature of the first seven minutes shows the capacity of film to create complex temporalities; it draws attention to the relationship between political discourse, image, and affect; and it sets up a visual imagery for the film that freely mixes fumigation, space travel, and nuclear reaction.

The archival footage of Arnaldo Tamayo Méndez, the first cuban in space, shares some similarities with the footage of Gagarin. The role of mass media is stressed by newspaper headlines, "UN CUBANO EN EL COSMOS," and groups of people gathered around television sets. Like Gagarin, Tamayo Méndez and his Soviet co-pilot are all smiles before and after their trip to space. The first Cuban in space, however, does not rely on a smile alone to win over those who are watching. He inserts an explicitly political message, declaring "Patria o Muerte.

Venceremos" from within the cockpit of the rocket itself. Driving the point home in an interview, Tamayo Méndez describes the seven days he spent in orbit not only as a scientific and technical achievement but also a political achievement made possible through socialism.

The Space Race is presented as the pinnacle of technological progress. The Soviet Union and the US dedicated nearly limitless resources to the top scientists and engineers in the world, and the pace of discovery, development, and application accelerated exponentially. It seemed that the sky was the limit, and even that metaphor falls short of the spirit of the moment. Despite all of the knowledge gained through this period of intense research and development, the space race was at its core a political confrontation between two superpowers with imperial intentions. *La obra del siglo* combines the contagiously optimistic archival footage of historic space flights with an unsettling exploration of the rocket and the less heroic registers of the space race.

In the opening sequence, the fumigator describes the Cold War as a competition to see who had the biggest 'manhood.' The accomplishments within the space race are likened to triumphantly 'whipping it out.' This insinuation that the space race was a testosterone-driven frenzy is revisited in a visceral way in one of the final scenes. The black and white scene is dimly lit. The viewer must strain to make sense of the shadows. Still, however, certain gestures and heated respiration make it clear that the three male characters are involved in some sort of sexual act. As Leo masturbates in the bathroom and Rafael gets into the heat of the moment with his date in the bedroom, the grandfather, Otto, desperately bangs on the bedroom door. He accuses Rafa's date of trying to steal his house. He insults her and demands that she face him. Then the old man literally 'whips it out' and begins shaking his semi-erect penis as he yells, "yo te voy a mostrar lo que es el cosmos, vo te voy a mostrar cómo tengo el cohete. ¡Mira! ¡Mira! ¡Gorda! ¡Mira como tengo el cohete!" (01:24:00-01:24:15). Eventually, Rafa, the middle-aged son, leaves the room naked and the two men fight in the hallway over who owns the house. After Rafa suggests that Otto is just jealous because he can't get 'it' up, the old man takes 'it' out again. It is difficult to make out exactly what is happening but the agitated movement and repetition of "¡mira! ¡mira!" by both parties suggests that they are masturbating in order to show off their erect penises. From the testosterone-drive metaphor put forth by the fumigator to the physical competition between the male characters and their "cohetes," La obra del siglo paints a dire picture of the intentions and impact of the space race.

Finally, there is a softer criticism within *La obra del siglo* of the space race as a form of escapism. The rocket as an object triggers both spatial and temporal dislocation. Rockets inspire awe as they conjure the possibilities that travel or life in space can offer. The rocket shoots off

into another space (outer space) and seemingly to another time (the future). Within the context of the CEN, there is an additional dislocation since the rocket also evokes a glorious past. As I have examined above, the high-rise that looked like a rocket about to take off immersed the fumigator and the old man in wistful musings about the cosmos. This is not just any cosmos, but rather the cosmos of a specific historical moment; a cosmos that represents the future as well as a frontier for imperial conquest. The fumigator does not say he *would like to go* to space in the future. Nor does he say he *would have liked to become* a cosmonaut. Rather he says he *would have liked to go to space*. The rocket conjures escapist nostalgia for Cold War heroism.

The film closes with a less nostalgic form of escapism. Following the visceral and violent confrontation with his father in the dimly lit hallway of the apartment, Rafa is shown walking amongst the buildings of the Ciudad Electro-Nuclear on a sunny day. He arrives to his apartment building and begins walking up the stairs after finding that the elevator is broken. This minor inconvenience truly seems like the last straw for the disillusioned engineer. The scene then takes on dream-like characteristics as it cuts away to a profile view of Rafa sitting hunched over inside the hull of nuclear reactor #1. The reactor begins to rumble and shake, suggesting another blast off. Finally, simple archival footage of a rocket shooting through the sky ends provides a fitting end for the film, in terms of form and content. For Rafa, the empty nuclear reactor turned rocket that shoots him off into space does not provide pleasure or evoke a smile. The defeated nuclear scientist does not look wistfully off into the distance, wondering what if? Instead, he turns to look at the camera and seems to communicate to the viewer a desire to escape it all. If only.

4.3.2 The Project of the Century

Through dialogue and imagery, the nuclear dream and the space race merge into a nostalgic past that projects itself into a high-tech future. Despite this overlap, it is important to consider the unique political, economic, social, and technological implications of nuclear energy in Cuba. The opening sequence explains that the project was a priority for Cuba due to its dependence on imported oil while the closing sequence simply states that twelve reactors were originally planned throughout the island. The Project of the Century represented accessible energy for the Cuban people and energy independence for the island nation. In this section, I explore the significance of the Project of the Century within the Cuban context. I consider its promise, abrupt halt, and the affective scenarios left in its wake.

Prior to ideological alignment with either socialism or the Soviet Union, a young Fidel Castro saw potential in nuclear power to address the social problems facing Cuba in 1953. In his famous four-hour legal defense following the attack on the Moncada barracks, he outlined the ways in which a revolutionary government would address poverty, health disparities, illiteracy, dispossession, lack of industry, and precarious housing. In relation to the housing problem, in particular, he states that 2.8 million people in suburban and rural Cuba live without electricity (Castro, *La historia* 69). In other words, over half of the national population of five and a half million that he cites (Castro, *La historia* 72). Through nationalization of the industry and the application of nuclear energy, which would significantly reduce the cost, Fidel Castro sustains that, "las posibilidades de llevar corriente eléctrica hasta el último rincón de la Isla son hoy mayores que nunca" (*La historia* 77).

Prior to Soviet influence, Fidel Castro found inspiration in José Martí. As he lays out these political, economic, and technological transformations, Fidel Castro underscored that the revolution should be guided not by advantage but by duty since the future, according to Martí, is on the side of duty (*La historia* 80-81). This detail signals a significant difference between the space race and the Cuban nuclear dream. While the space race was a political competition between opposing forces, the nuclear dream was directly linked to social problems affecting the Cuban people. In the film, Rafa dedicated his life to the project. He studied nuclear engineering in Russia for six years and then returned to Cienfuegos to apply his knowledge: "Y vine a trabajar de sol a sol porque tenía la esperanza de que ese reactor iluminara toda la isla" (01:01:44-01:01:49).

Rafa represents a generation of Cuban scientists and engineers that dedicated their careers to carrying out the Project of the Century. Their story is tragic yet it is not the only story. Another archival sequence, for example, introduces the *Contingente Vladimir Ilich Lenin*, a worker's brigade that attracted people from all fourteen provinces to carry out the largest construction project in Cuban history. Like the nuclear engineers, the construction workers were drawn to the Nuclear City by a sense of duty. When asked how such a diverse group manages to get along, one welder from the *Contingente Lenin* explains: "Es una gran familia. Cuba es Cuba. Nosotros no vinimos por la provincia aquí. Vinimos por la nación" (00:27:40-00:27:45). As a daring technological, political, economic, and social endeavor, the Project of the Century attracted workers from throughout Cuba, from Russia, and from other allied nations.

An entire city was built from the ground up to house the diverse group of laborers, technicians, security guards, managers, teachers, performers, crane drivers, family members, and

other professionals. As the archival footage continues, a promotional video for the Nuclear City begins. Apartment buildings are accompanied by social infrastructure, such as preschool, primary and secondary schools, a hospital, and a post office with direct communication to Russia. Images of modest buildings give way to a telegraph office buzzing with action and finally to large groups of people swimming, smiling, and walking outdoors. The narrator describes the different leisure facilities offered to the workers: a night club, a pool, and a natural area along the coastline. The self-contained city was an experiment in socialist housing, a model city for the future.

I have focused on the future-oriented and socially engaged aspects of the Project of the Century. Nevertheless, one could reread the same scenes to look for tensions or omens. First of all, a subtitle situates the sequence examined above on March 8, 1986. The date is significant because it means the optimistic footage was filmed one month before the nuclear disaster at Chernobyl, an event that would inevitably haunt the Soviet-Cuban endeavor. The date is also a holiday: International Women's Day. The sequence of archival footage, in fact, begins with a tribute to the women of the Nuclear City, complete with smiling women, flowers, and sentimental music. The music continues as the shot moves to the job site and zooms in on a young black woman with a serious expression adjusting her hardhat. It is unclear if this is part of the original tribute or additional archival footage that has been pieced together. Finally, the focus shifts to another woman on the job site wearing a tight blue romper and holding an umbrella. The camera inexplicably zooms in on her behind for ten seconds before panning out to take in the sights and sounds of men and machines and moving onto interviews with male workers. This is a minor detail within the context of the overall film, but the shot lasts long enough to make the

viewer uncomfortable The sequence encourages the viewer to imagine the experience of women in the Project of the Century.

Women appear throughout the film as performers, factory workers, security guards, teachers, telegraph operators, crane drivers, and job site managers. It is significant that this information is revealed through images or dialogue between the male characters. The only woman to speak for herself is Marta, Rafa's date, while the rest of the women appear as an object of the camera or a figment of the imagination of the male characters. *La obra del siglo* seems to suggest that women did not have an equal and active role in the Project of the Century. The limited role of women as well as the disaster at Chernobyl appear as cracks in the shiny technological future of the nuclear dream. Quintela teases out these tensions from the original archival footage and explores them in the present moment of the narrative film.

These concerns, and others, hover in the realm of the hypothetical since the project was abruptly halted in 1992. Fidel Castro explained, first to the plant workers and then to the rest of the country, that Cuba could no longer maintain the project. He gives several reasons. Cuba was going through the Special Period in Times of Peace, triggered by the collapse of the socialist bloc. Russia had changed the terms of the bilateral agreement, dramatically reducing its financial, technical, and logistical support for the project. Cuba no longer had a reliable source of radioactive material nor did it have access to an international fleet of ships to transport materials. The country could not afford to keep foreign technicians on the project. Fidel explained: "Cada día que pasa enterramos nuevos recursos humanos y materiales en esa obra" (XXXIX aniversario).

Cuban author and literary critic Ahmel Echevarría recovers many of the details of this significant moment in history in his essay "Seis millones de pares de zapatos plásticos." The curious title is a quote from the 1992 speech cited above, in which Fidel explains that the hard currency needed to pay the salaries of the foreign technicians would be enough to purchase raw material for six million pairs of plastic shoes. In his essay, Echevarría explores the suspension of the project and its aftermath in a variety of cultural forms: a documentary, a chronicle, a play, a testimony, and *La obra del siglo*. Echevarría explains that Fidel's speeches marked a clear before and after. The Nuclear Plant and City soon became a "non-place" marked by melancholy, dysfunctional relationships, indifference, and disillusioned nuclear engineers. In the final paragraphs of this section, I will build on this assessment of the Nuclear City and Plant as a non-place. Beginning with the definitive moment itself, that is, the suspension of the project as remembered by Rafa, I will explore the techniques used by Quintela to portray a place and its people lost in time and space.

Rafa and his son Leo visit the abandoned reactor. It is located on an empty concrete plot, housed between unfinished walls, a few kilometers away from the Nuclear City. The scene alternates between the two men playing inside the hull of the reactor and archival footage of the arrival of reactor in 1989. Throughout, Rafa tells his son about his professional trajectory as a nuclear engineer. He wistfully remembers his dedication, his years of study, his sense of duty. Then he lists the historical events leading up to the suspension of the project:

¿Y qué pasó? ¿Qué pasó? Se cayó el muro de Berlin. Se cayó el campo socialista. Se desmoronó la Unión Soviética y después apareció Fidel aquí bajo aquel torrencial aguacero para decirnos, si la naturaleza llora nosotros no podemos llorar porque si nosotros lloramos, si nosotros lloramos es por orgullo y no por cobardía, pues nosotros

debemos enfrentar nuestros problemas... Pero yo fui el primero que empezó a llorar. (01:02:00-01:02:51)

The delivery is moving. Monumental events are limited to brief sentences. As Rafa recalls Fidel's speech, he draws out his words and repeats phrases, evoking the leader's idiosyncratic style. There is a long pause and then he quickly admits that he was the first to start crying in response to the devastating news. Within this anecdote, Fidel's penchant for flowery language lays the ground for a more complex metaphor involving tears and rain. A metaphor, I suggest, that captures the creation of the non-place. Rafa's emotional response to the suspension of the project conjures the iconic monologue from the classic dystopian film *Blade Runner*. In the final scene of the 1982 film, a sentient robot that is about to be destroyed reflects on his experiences and concludes that: "All those moments will be lost in time, like tears in rain." *Blade Runner* explores, among other themes, the unintended consequences of technological progress and the afterlives of retired technology. Within the context of *La obra del siglo*, this metaphor speaks to the physical installations that have been discarded and to the memories and lives of those that continue to live in the abandoned project.

In another scene, Otto explains to his grandson that the Nuclear City has become a ghost town, an embarrassing reminder of the failed nuclear dream: "Todos quieren que nos perdamos por aquí. Tienen verguenza que sigamos aquí" (00:51:30-00:51:40). Their uneasy existence is portrayed through the contrast of archival footage and the present moment of the film. For example, the optimistic archival footage from 1986 ends with the natural area designated for the plant workers. The spectator hears the soothing sound of the ocean and sees people enjoying the coastline amidst muted but pleasant colors. Then, a black and white sequence zooms in on

Accompanied by the sounds of insects buzzing on a hot summer day, some people stroll while others even appear to stagger under the heat. In one shot, three men sit on metal chairs surrounded by dilapidated apartment buildings. In another, a small dog trots down a sidewalk until it gives way to rubble. In the final scene, children play in the water spilling from a tank attached to a small tractor while adults collect buckets of water for their homes. The tanks are mentioned at another moment of the film as a breeding ground for the disease-carrying mosquitos that plague the Nuclear City. The Nuclear City looks like a post-apocalyptic scene.

One scene in particular delves into the eerie atmosphere of the forgotten city and its inhabitants. It occurs near the beginning of the film, when the viewer is still piecing together information about the setting and making sense of the bricolage style of the movie. The scene is set aboard a moving ferry on a dark night. Otto's voice identifies each of the passengers: a crane operator, a security guard, a television producer, a picapiedras, a nuclear engineer, a Russian teacher, and a soprano singer from Moscow. The penetrating darkness, the extended shot of each passenger, the gestures, and the expressions create a series of haunting living portraits. Three passengers are particularly unsettling. An ancient woman, with deep wrinkles carved into her face and her lips tightly closed, returns the gaze of the camera as her hair blows slightly in the wind. She operated a crane for twenty years. A nuclear engineer looks up from his reading to meet the gaze of the camera. He anxiously chews his lip. His expression and body language convey frustration, annoyance, and defeat. Finally, there is the *picapiedras*, a young, black man who stands out from the middle-aged and elderly passengers. The young man's eyes pierce the camera. In the Nuclear City, the *picapiedras* are not stone masons. Otto describes them as

scavengers that sneak into the plant at night in order to dismantle it and sell the parts for profit.

These living portraits created on a moving ferry convey a sense of limbo, of being caught in between presence and absence, past and present, life and death.

4.3.3 The Non-Place and the Disaster That Never Happened

Through the bricolage style of the film, what was and what could have been coexist with what is in the Nuclear Plant and City. In the previous section, I have considered how the technical, political, economic, and affective investment in the Cuban nuclear dream had the rug pulled out from under it when the Soviet Union dissolved. I explored how the film portrayed the aftermath of the project through both form and content, revealing the abandoned Nuclear City as a non-place, a ghost town, a post-apocalyptic scene, and a dream-like limbo. In this final section, I explore how the possibility of nuclear disaster overlaps with this trajectory, troubling the archival footage and haunting the ghost town.

On March 1, 1986, Antonio Benítez Rojo published the essay "La isla que se repite: para una reinterpretación de la cultura caribeña," which would later form the foundation of his now canonical monograph of the same name. I go back to the essay due to the date of publication, one month before the Chernobyl disaster. Within this text, the literary author and cultural critic mentions the nuclear face-off that played out between Cuba, the Soviet Union, and the United States in October of 1962. He recalls what the threat of nuclear disaster felt like on Cuban soil. As the crisis reached its climax, the city was silent and the air was thick with anticipation. He was reassured, however, that there would be no apocalypse when he saw two older black women

walking by "de cierta manera" (121). He concludes that the Caribbean simply is not an apocalyptic world.

Unpacking this "cierta manera" is to a large degree the focus of both his essay and monograph. For example, Benitez Rojo contrasts the Russian missiles and the worldview they represent with the Caribbean context in which the crisis unfolded:

La cultura de los archipiélagos no es terrestre —como son casi todas las culturas—; es fluvial y marina. Se trata de una cultura de rumbos, no de rutas; de aproximaciones, no de resultados exactos. Aquí el mundo de las líneas rectas y los ángulos (la esquina, el plano inclinado, la encrucijada) no domina; el que domina es el mundo fluido de las curvas. La cultura de los meta-archipiélagos es un eterno retorno, un detour sin propósito o meta, un rodeo que no lleva a otro lugar que a sí mismo; es una máquina feedback, como es el mar, el viento, la Vía Láctea, la novela, la naturaleza, la cadena biológica, la música. (121)

Benítez Rojo compares a progress-oriented knowledge based on precision and the possibility of knowing everything to an alternative epistemology that incorporates all of the senses and opens itself to a non-linear sense of time and progress. These reflections, inspired by the nuclear threat of the missile crisis, are pertinent for the Cuban-Soviet collaboration on the Project of the Century.

La obra del siglo encourages the viewer to imagine the possibility of nuclear disaster on Cuban soil. The topic comes up in conversation as Otto helps his neighbor, the ferry driver, bury his dead dog. As they dig a grave, the silhouette of the nuclear plant on the horizon irks the ferry driver. He calls it a "beast" and a "piece of shit." An exchange between the two men reveals several different attitudes toward the plant: apprehension, contempt, and nostalgia:

Otto, ¿tú te has puesto a pensar qué hubiera pasado si el monstruo ese explotaba?

Lo he pensando a veces, sí, por lo de Chernóbil; pero pa eso tenían que haberla terminado... Por eso lo que hago es pensar mucho en las rubias que iban a venir,

buenotas, que iban a venir pa acá.

Yo sé que tú —no antes, ahora—, ahora tú estás dispuesto a reventar con tal de morirte rodeado de rubias. (00:40:40-00:41:20)

Looking beyond the sexism —a topic that has been explored in other sections—, this simple scene offers more than meets eye. As the characters contemplate the reactor on the horizon, several temporal and spatial dislocations take place. In the distance, the reactor appears as both a hazy memory and an irritating daily reminder. It spurs conversation about what happened, what could have happened, and imaginary scenarios about what could still happen. The ferry driver's tongue-in-cheek comment transports the project from the 1980s, complete with Soviet women and impending nuclear disaster, into the present moment.

How real was the threat of nuclear disaster in Cuba? Archival footage within the film from the late 1980s shows both Cuban and Soviet specialists insisting that the Juraguá Plant would be safe, or at least safer than Chernobyl. While the Chernobyl Plant used graphite to moderate a chain reaction, an element that greatly exacerbated the disaster, the Juraguá Plant relied on pressurized water alone. In his essay about cultural representations of the Cuban nuclear dream, however, Ahmel Echevarría explains that the Juraguá Plant was a trial run for the use of pressurized water reactors in tropical climates: "Cuba sería la confirmación de que los reactores tropicales podrían ser exportados a otros países de condiciones climáticas similares" ("Seis"). In other words, the Juraguá Plant was the first step in a long-term plan for expanding nuclear capacity and Soviet influence in the Global south.

The experiment applied Soviet technology, materials, and expertise to the tropical island nation. Through archival footage, *La obra del siglo* hints at the miscommunications,

miscalculations, and oversights that plagued the Cuban-Soviet collaboration. The first clip features two Russian men in what appears to be a post-Chernobyl press conference explaining new safety measures that had been incorporated into the plans for the Juraguá Plant. One of the men reads handwritten notes in Russian while the other looks over his shoulder to translate the information to Spanish. The information is difficult to follow and the translation appears to take place in the moment. The clip underscores the fact that the scientific and technical aspects of the project were developed in Russia and in Russian. Despite the ambitious Russian language training that accompanied the Project of the Century, this clip seems to suggest that the linguistic barrier would have affected the outcome.

Following the press conference, additional archival footage suggests that the materials designed in Russia were ill-equipped for the Caribbean climate. Interviews with engineers, supervisors, and welders reveal that pieces cracked under pressure when tested. Other pieces arrived with defects or missing parts. The Cuban technicians were responsible for catching and correcting these mistakes. An on-screen text suggests that even the optimal combination of all of these factors could have triggered "hechos impredecibles" (00:45:41). These details suggest that the Juraguá Plant was not a priority for the Soviet Union. From the perspective of those on the ground in the Nuclear City, these details provoke apprehension, even through the radioactive materials never arrived and the plant was never operational. In the final paragraphs of my analysis of *La obra del siglo*, I will explore how nuclear fission and radiation haunt the Nuclear City.

Uranium, fission, and radiation assume a spectral presence at the level of the dialogue.

The characters speak of the radioactive material in the present or future tense, despite the fact

that it never arrived to the Nuclear City. In doing so, they refer to something that is not there, conjuring a vague presence or palpable absence. First, Leo tells his father that he wants to tattoo *uranio 235* on his forearm. The tattoo would be a curious trace —a permanent reminder imprinted upon his body— of the radioactive material. Another placeholder for uranium appears later in the film, within the nuclear reactor itself. As Leo hangs from the metal protrusions inside the hull of the reactor, Rafa explains that they are "inserts" that hold bars containing uranium. He proceeds to describe nuclear fission: A chain reaction begins within the inserts and produces heat, which in turn creates steam and moves the turbines, generating electricity. Here, Rafa provides imagery of nuclear fission, contextualizing the steam-based imagery that appears in other scenes.

Throughout the film, thick clouds of pesticide move through the streets of the Nuclear City, fill the interior spaces of apartment buildings, and cause the characters to cough. Audio from a public service announcement about exposure to radiation reinforces this sensation, as do background noises in the form of hisses, rumbles, sirens, alarms, and low-frequency buzzing. If the spectator were to close their eyes and guide themselves by sound alone, it would feel as if they were inside an active nuclear plant. In combination with the desolate landscape, the unfinished buildings, the clouds of smoke, and the black and white footage, the present moment of the film becomes a post-apocalyptic scene. The post-disaster atmosphere is haunting due to the simple fact that the disaster never occurred. What *could have been* coexists with what *is*. The pesticide clouds themselves are also phantom-like. They materialize and dissipate. They evoke the space race in one moment and nuclear fission in another. Through these non-narrative aspects

of the film, *La obra del siglo* creates an unsettling atmosphere that merges the space race, the mosquito plague, nuclear disaster, and their accompanying temporalities.

What is left in the wake of the Project of the Century? What is the daily experience represented in the film if one takes away the polyvalent clouds, the daydreams, the nostalgia, and the utopian and dystopian projections? The present moment of the film presents the Nuclear City with many of the characteristics that marked the worst years of the Special Period: blackouts, broken elevators, decaying buildings, walking and riding bicycles in the absence of motorized vehicles, and raising pigs for sustenance. The Nuclear City was hit particularly hard by the extreme economic crisis that wiped out the Project of the Century, eliminating thousands of job overnight and the movement of supplies to and from the isolated city. While the Special Period had no clear end date, the most dire circumstances arguably resided during the first decade of the twenty-first century. The Nuclear City, in contrast, finds itself immersed in a never-ending Special Period with no relief in sight.

The figure of the *picapiedra* that appears in the ferry scene further suggests that the Nuclear City never escaped the Special Period. The term, used to describe people who take the nuclear plant apart to sell the materials for profit, brings to mind an anecdote that reveals the scarcity and resourcefulness of the 1990s. In *Community and Culture in Post-Soviet Cuba*, Guillermina De Ferrari calls attention to a striking phenomenon from the V Havana Biennal. The event was a turning point for Cuban art on the global stage, yet it took place in 1994, at the height of the crisis. While art collectors and curators flocked to Havana, local attendees swiped

everyday objects like soap and cigarettes (*Vulnerable* 175-6).³⁷ Both instances of stealing could in fact be interpreted as forms of inadvertent civil disobedience, a critique of the government's priorities.

Despite these similarities, there is an important distinction between taking a small object that fulfills a basic need from an art installation and making a living by selling the materials of a nuclear plant that was never finished. *Los picapiedras* convey a complex temporality; the name evokes the Spanish translation of *The Flintstones*, a 1960s cartoon set in the Stone Age, and the final scenes of the film further develop this time warp. The romantic ballad "Me quedé con ganas" by Cuban singer-songwriter Vicente Rojas plays as archival footage from the 1990s pans across the unfinished Nuclear City. The music continues as an unexpected shot of a group of women in street clothes removing large rocks from a field appears. The subtitle informs the viewer that they are seeing a "Siembra de cocos" from 1996. The rock removal continues for over a minute before it cuts away to a man walking behind a water trunk, irrigating the field with a hose.

Once again, the scene is temporally and affectively complex. By 1996, the Nuclear Project —and Nuclear City— had been abandoned by the State for several years. It was also the height of the economic crisis on the island. Nevertheless, the group of women clear the rubble with a positive attitude (some smile at the camera). Although it was never enacted, there was rumor of a government plan to send the city's inhabitants to the countryside. The idea was that if conditions in Havana became truly unsustainable, people could survive through subsistence

³⁷ Since the filming of *La obra del siglo* the Cuban government has in fact placed security guards around the plant to prevent the *picapiedras* from dismantling what was left of the plant, not because the government plans to finish construction but because it wants to offer storage for nuclear waste to foreign countries. See both features by Caballero 2017.

farming. This final piece of archival footage looks like it could have been propaganda for such a plan, as everyone pitches in to scrape by in the isolated city nestled in the Cuban countryside.

Whether it is the fumigation clouds that suggests nuclear reaction, the *picapiedras* who raid the abandoned plant for scraps at night, or the group of women removing rocks from a field during the worst years of the crisis, the film hints at a before and an after. What exactly happened? Was it a nuclear disaster? The fall of the Soviet Union? The Special Period in Times of Peace? In my analysis of *La obra del siglo*, I have proposed that the post-apocalyptic landscape of the Nuclear City serves as a trace of the colonial logic of Soviet development. Director Carlos M. Quintela explores the discursive, material, and affective nuances of the Project of the Century, weaving in and out of themes like Soviet imperialism and Cuban pride; emotions like frustration, disillusion, nostalgia, and anger; and structures that signal both a desolate present and a future that never was.

4.4 In the Wake

In this chapter, I have analyzed the 2012 novel *Aux frontières de la soif* by author Kettly Mars and the 2015 film *La obra del siglo* by director Carlos M. Quintela. The former portrays the breakdown of reconstruction following the Haitian earthquake while the latter explores the afterlife of the unfinished Cuban nuclear plant known as the Project of the Century. I have approached these two works through the lens of development, that is, of foreign intervention in the form of infrastructure, resources, and expertise. Specifically, I have examined how the initial pledge of support —in the form of a bilateral agreement or a flood of international donations—

generates expectations in the intended beneficiaries and mobilizes economic benefits and geopolitical alliances regardless of whether or not the project is completed.

In the two works considered, the perspective of the local agent of development highlights the challenges of carrying out a project on the ground. Rafa, the defeated nuclear engineer, and Fito, the cultural figure turned private contractor, find themselves caught between a lofty pledge and its material realities. Rafa represents a generation of highly trained nuclear scientists who dedicated their careers and their lives to the nuclear dream and the Soviet-Cuban collaboration. His extended formation in Russia suggests a more collaborative approach to development, yet his fate becomes all the more tragic when the project is abandoned for economic and geopolitical reasons. Fito, in contrast, encounters persistent administrative obstacles set by the Haitian government and the international donors that prevent his housing project from getting off the ground. His frustration inexplicably leads him to participate in an underage prostitution ring in the very community he was supposed to serve. His character serves as metonymy for widespread corruption and sexual abuse, revealing a lack of oversight and raising questions about human nature.

Fito and Rafa inhabit the affective scenario created by the promise of dignified living conditions in post-quake Haiti or of socialist utopia made possible by nuclear energy in Cuba. Along with the other characters in both the film and the novel, they are caught between the pledge and its material, psychological, social, economic, and political consequences. In both cases, the result is a highly charged atmosphere marked by melancholy, frustration, hopelessness, and violence. Neither work presents a way out, yet they both portray development as a complex

ecosystem of people, ideas, objects, and institutions, thus allowing the reader or viewer to get a sense of the overall power structure and the specific ways in which development fails.

5. Epilogue: Infrastructural Justice

The corpus that I have selected responds to material realities in the Caribbean that have continued to unfold as the project has slowly but steadily taken shape. Despite feeling a sense of urgency, the project has stubbornly followed its own tempo. Through trial and error, I have developed a methodology for analyzing infrastructure within literature. This task proved to be challenging, since I was interested not only in explicit representations of infrastructure but also in the diverse ways in which it leaves its mark on the text. I have looked to setting, atmosphere, figurative speech, characterization, and narrative structure. I have explored the ways in which roads, energy, and water appear through metaphor and metonymy, as well as in rhythm, sensation, and affect. The portrait series *Puerto Ricans Underwater* and the film *La obra del siglo* have provided a visual counterpart to the six literary texts.

What does a literary approach contribute to the interdisciplinary field of critical infrastructure studies? Above all, narrative has the potential to portray multiple perspectives that are in tension. For example, La guaracha del Macho Camacho, Habana underguater, and La obra del siglo do not have a single protagonist; instead, an omniscient narrator moves from character to character, revealing different interpretations of the same events. Aux frontières de la soif and Cualquier miércoles soy tuya are both channeled through the perspective of a frustrated writer, yet the experiences of those around them trigger an existential and ethical crisis that ultimately pushes them to write the very book you are reading. In a similar way, Midnight Robber contrasts the coming-of-age, coming-to-consciousness of an adolescent protagonist with the experiences and attitudes of the characters around her. Regardless of the narrative strategy

employed, these works show how infrastructures connect a community, a city, or a nation, while also drawing attention to differential access.

Colonialism is the underlying thread in all of the works considered, yet it is generally not represented directly. It appears through traces; above all, through intertextual references to political discourse and colonial history. In some cases, slogans or speeches are repeated or remixed in the midst of failing, incomplete, or inadequate infrastructure. A biting satire of the "Puerto Rican miracle" takes place amidst an apocalyptic traffic jam in La guaracha del Macho Camacho. In La obra del siglo triumphant archival footage of Soviet technological achievements appears alongside ghostly black and white scenes set in the ruins of the unfinished project. In the two speculative works considered, the colonial past haunts the future. Both utopia and dystopia alike are marked by reconfigured power relations in which colonial hierarchies manifest themselves in new and unexpected ways. And finally, specific objects serve as metonymy for complex power relations. The ubiquitous tarps and blue helmets are a painful reminder of the controversial presence of the international community in Aux frontières de la soif, windmills stand in for centuries of Spanish and US colonialism in "Hay una deuda," and the erasure of the douen species from the network database exposes the Afro-Caribbean utopia's foundational violence in Midnight Robber.

These traces elaborate a compelling critique of the promises tied up with infrastructure. Whether it is an explicit pledge to complete a project or the abstract promise of a political slogan, whether it is the dignity that electricity represents to a migrant worker or the dream of a better world made possible through technological progress, infrastructure points to a future that never arrives. As a "promising form," it invites affective investment and defers fulfillment. The

promise of infrastructure alone makes it possible for individuals and institutions to mobilize funds and accomplish personal or geopolitical aims. I argue throughout this dissertation that these characteristics encourage empty promises, in which lofty claims are made with little accountability or incentive for fulfillment. The works selected expose these empty promises while staging a different investment in the future, a process-based investment that embraces uncertainty, vulnerability, and community.

On a more practical level, these literary and cultural representations convey the historical underdevelopment of the Caribbean and make a compelling case for reparations. Following common usage throughout the African diaspora, I understand reparations to be a material compensation and acknowledgement of responsibility for the harm caused by transatlantic slavery. Given the intimate relationship between infrastructure and colonialism in the twentieth and twenty-first centuries, I also interpret reparations in the literal sense, meaning to rebuild and repair. For the Greater Antilles, reparations should include an acknowledgement of the lasting consequences of modernization, development, and aid, and a commitment to rebuilding the services and structures that sustain everyday life in the Caribbean.

The corpus I have analyzed suggests that this would be no easy task, yet it is not without precedent. A Caribbean-based movement for reparations has gained momentum in the first decades of the twenty-first century. Former Haitian president Jean-Bertrand Aristide suggested that both France and the US owed Haiti reparations before he was deposed in 2004, while CARICOM —representing over fifteen Caribbean nations— has made official demands for reparations from several European nations since 2013. The first breakthrough occurred in 2019 after the University of Glasgow completed a year-long investigation to uncover how much the

institution had financially benefitted from slavery in the British Caribbean. The Scottish university then signed what many have called a reparations agreement with the University of the West Indies, committing to raise £20 million over 20 years. This amount is equal to the compensation given to British slaveholders after emancipation, and will be used to support the Glasgow-Caribbean Centre for Development Research ("Reparations"). The agreement is historic in many ways. The acknowledgement of complicity in colonial violence, the commitment of long-term support, the emphasis on knowledge, and the collaborative approach to creating developmental policies could set a precedent for the region. Of course, it will depend upon how these pledges are carried out.

6. Bibliography

- Acosta Cruz, María. *Dream Nation: Puerto Rican Culture and the Fictions of Independence*. Rutgers, 2014.
- Adéèkó, Adélékè. "Slave Rebellion and Magical Realism: The Kingdom of this World." *The Slave's Rebellion: Literature, History, Orature*. Indiana University Press, 2005, pp. 104-120.
- Anderson, Jeffrey, ed. *The Voodoo Encyclopedia: Magic, Ritual, and Religion*. Boston, ABC-CLIO, 2015.
- Appadurai, Arjun. "Introduction: commodities and the politics of value." *The social life of things: Commodities in cultural perspective*, edited by Arjun Appadurai, Cambridge University Press, 2013.
- Appel, Hannah, Nikhil Anand, and Akhil Gupta, eds. *The Promise of Infrastructure*. Duke University Press, 2018.
- Arthus, Wien Weibert, "The Alliance for Progress: A Case Study of Failure of International Commitments." *The Idea of Haiti: Rethinking Crisis and Development*, edited by Millery Polyné, University of Minnesota Press, 2013, pp. 135-164.
- Baccolini, Raffaella and Tom Moylan, eds. *Dark Horizons: Science Fiction and the Dystopian Imagination*. Routledge, 2003.
- Baker Josephs, Kelly. "Beyond Geography, Past Time: Afrofuturism, *The Rainmaker's Mistake*, and Caribbean Studies." *small axe*, vol. 41, July 2013, pp. 123-35.
- Baron, Guy and Gareth Hall. "Access Online: Internet Governance and Image in Cuba." *Bulletin of Latin American Research*, vol. 34, no. 3, 2015, pp. 340-355.
- Barradas, Efraín. *Para leer en puertorriqueño: Acercamiento a la obra de Luis Rafael Sánchez*. San Juan: Editorial Cultural, Inc., 1981.
- Beauchamp, José. "La guaracha del Macho Camacho: Lectura política y visión del mundo." Revista de Estudios Hispánicos, vol. 5, 1978, pp. 91-128.
- Benedicty, Alessandra. "Male protagonists and Haitian (un)inhabitability in Kettly Mars's *L'Heure hybride* and *Aux frontières de la soif.*" *Francosphères*, vol. 4, no. 1, 2014, pp. 105-120.

- "Benefits and Applications." *Nanoscale Science, Engineering, and Technology Subcommittee,* https://www.nano.gov/you/nanotechnology-benefits.
- Benítez Rojo, Antonio. "La isla que se repite: para una reinterpretación de la cultura caribeña." *Cuadernos hispanoamericanos*, no. 429, 1986, pp. 115-132.
- Berlant, Lauren. Cruel Optimism. Duke University Press, 2011.
- Berman-Santana, Déborah. "Puerto Rico's Operation Bootstrap: Colonial Roots of a Persistent Model for "Third World" Development." *Revista geográfica*, vol. 124, 1998, pp. 87-116.
- "big brother, n." OED Online. Oxford University Press, 2018.
- Bloch, Ernst. *The Principle of Hope*, vol. 1. 1959. Translated by Neville Plaice, Stephen Plaice, and Paul Night, The MIT Press, 1996.
- Bloom, Lisa E. "Hauntological Environmental Art: The Photographic Frame and the Nuclear Afterlife of Chernobyl in Lina Selander's *Lenin's Lamp*." *Journal of Visual Culture*, vol. 17, no. 2, 2015, pp. 223-237.
- Boehmer, Elleke and Dominic Davies. *Planned Violence: Post/Colonial Urban Infrastructure, Literature and Culture.* Palgrave Macmillan, 2018.
- Bogues, Anthony. *Black Heretics, Black Prophets: Radical Political Intellectuals*. Routledge, 2003.
- Bonilla, Yarimar. "Ordinary Sovereignty." small Axe, vol. 17, no. 3, 2013, pp. 152-165.
- Bowker, Geoffrey C. And Susan Leigh Star. Sorting Things Out: Classification and Its Consequences. MIT Press, 1999.
- Brown, Bill. "The Matter of Materialism: Literary Mediations." *Material Powers: Cultural Studies, History and the Material Turn,* edited by Patrick Joyce and Tony Bennett, Routledge, 2010, pp. 60-78.
- Caballero, Atilio. "Sub-Zona 1 (I)." *Hypermedia Magazine*, 5 September 2017, https://hypermediamagazine.com/2017/08/05/atilio-caballero-sub-zona-1-i/.
- —. "Sub-Zona 1 (II)." *Hypermedia Magazine*, 12 September 2017, https://hypermediamagazine.com/2017/08/12/atilio-caballero-sub-zona-1-i-2/.
- Cabrera, Lydia. El Monte. Letras Cubanas, 1993.

- Campbell, Mavis C. *The Maroons of Jamaica, 1655-1796: A History of Resistance, Collaboration and Betrayal.* Bergin & Garvey, 1988.
- Castells, Manuel. The Rise of the Network Society. 2nd ed., Blackwell Publishing, 2010.
- Castro, Fidel. *La historia me absolverá*, con prólogo de Heinz Dieterich Steffan. Txalaparta, 1999.
- —. "XXXIX aniversario del asalto al cuartel Moncada y el XXXV del levantamiento de Cienfuegos." 5 September 1992, Cienfuegos, Cuba. Speech. http://www.cuba.cu/gobierno/discursos/1992/esp/f050992e.html.
- Castro-Gómez, Santiago. La hybris del punto cero: Ciencia, raza e ilustración en la Nueva Granada (1750-1816). Editorial Pontificia Universidad Javeriana, 2005.
- Chadwick, Joseph. "'Repito para consumo de los radioyentes': Repetition and Fetishism in *La guaracha del Macho Camacho.*" *Revista de Estudios Hispánicos*, vol. 21, 1987, pp. 61-83.
- Chakravartty, Paula and Denise Ferreira da Silva. "Accumulation, Dispossession, and Debt: The Racial Logic of Global Capitalism-An Introduction." *American Quarterly*, vol. 64, no. 3, 2012, pp. 361-385.
- Chevannes, Barry. Rastafari: Roots and Ideology. Syracuse University Press, 1980.
- Chu, Julie Y. "When infrastructures attack: The workings of disrepair in China." *American Ethnologist*, vol. 41, no. 2, 2014, pp. 351-367.
- Cruz, Arnaldo. "Repetition and the Language of the Mass Media in Luis Rafael Sánchez's *La guaracha del Macho Camacho.*" *Latin American Literary Review*, vol. 13, no. 26, 1985, pp. 35-48.
- Dalleo, Raphael. Caribbean Literature and the Public Sphere. University of Virginia Press, 2011.
- De Ferrari, Guillermina. Community and Culture in Post-Soviet Cuba. Routledge, 2015.
- —. Vulnerable States. Bodies of Memory in Contemporary Caribbean Fiction. University of Virginia Press, 2007.
- Deleuze, Gilles and Félix Guattari. "November 28, 1947: How Do You Make Yourself A Body Without Organs." *A Thousand Plateaus: Capitalism and Schizophrenia*. University of Minnesota, 1987, pp. 144-166.

- De Maeseneer, Rita and Salvador Mercado Rodríguez, eds. *Ocho veces Luis Rafael Sánchez*. Editorial Verbum, 2008.
- Díaz Quiñones, Arcadio. Introduction. *La guaracha del Macho Camacho*. 1976. 3rd ed, Cátedra, 2005
- Díaz-Zambrana, Rosana. "Del voyeur al voyant caribeño: Promiscuidad, espacio y escritura en *Cualquier miércoles soy tuya* de Mayra Santos Febres." *Lección errante: Mayra Santos Febres y el Caribe contemporáneo*. Editorial Isla Negra, 2011.
- Dietz, James. Economic History of Puerto Rico: Institutional Change and Capitalist Development. Princeton, 1986.
- Di Razza, Namie. "Mission in Transition: Planning for the End of UN Peacekeeping in Haiti." International Peace Institute, December 2018.
- Dubois, Laurent. "Haitian Sovereignty: A Brief History." *Who Owns Haiti? People, Power, and Sovereignty*, edited by Freeman and Maguire, University Press of Florida, 2017, pp. 16-28.
- Dulles, John Foster. *Attainment of Self-Government by the Commonwealth of Puerto Rico*. US State Department, 31 March 1953, https://history.state.gov/historicaldocuments/frus1952-54v03/d909.
- Echevarría, Ahmel. "Seis millones de pares de zapatos plásticos." *Hypermedia Magazine*, 9 December 2016, https://www.hypermediamagazine.com/arte/cine/ahmel-echevarria-seis-millones-de-pares-de-zapatos-plasticos/.
- Edwards P.N. "Infrastructure and Modernity." *Modernity and Technology*, edited by Thomas Misa, Philip Brey, and Andrew Feenberg, MIT Press, 2003, pp. 185-225.
- Elgammal, Ahmed, Bingchen Lui, Mohamed Elhoseiny, and Marian Mazzone. "CAN: Creative Adversarial Networks Generating "Art" by Learning About Styles and Deviating from Style Norms." arXiv:1706.07068 [cs.AI], 2017, pp. 1-22.
- Enteen, Jillana. "On the Receiving End of Colonization': Nalo Hopkinson's 'Nansi Web." *Science Fiction Studies*, vol. 34, 2007, pp. 262-282.
- "Eshu." Encyclopaedia Britannica Online, 2015.
- Estrada-López, Emmanuel. "ELA, o la muerte de lo inexistente: Crónica del performance 'Cena negra' frente al Capitolio." *Diálogo UPR*, 3 July 2016. http://dialogoupr.com/ela-o-la-muerte-de-lo-inexistente/.

- Fehskens, Erin. "The Matter of Bodies: Materiality on Nalo Hopkinson's Cybernetic Planet." *The Global South,* vol. 4, no. 2, 2010, pp. 136-156.
- Figueroa, Víctor. "Drogas y marginalidad en *Cualquier miércoles soy tuya* de Mayra Santos Febres." *Revista Canadiense de Estudios Hispánicos*, vol. 38, no. 3, pp. 443-466.
- Fischer, Sibylle. *Modernity Disavowed*. Duke University Press, 2004.
- Freeman, Scott and Robert Maguire, eds. *Who Owns Haiti? People, Power, and Sovereignty.* University Press of Florida, 2017.
- Frow, John. "Matter and Materialism." *Material Powers: Cultural Studies, History and the Material Turn*, edited by Tony Bennett and Patrick Joyce, Routledge, 2010, pp. 25-37.
- Gelpí, Juan. *Literatura y paternalismo*. Editorial de la Universidad de Puerto Rico, 1993.
- González Fernández, Maielis. "Distopías en el ciberpunk cubano: *CH, Ofidia* y *Habana underguater*." *Korad*, vol. 13, April-June, 2013, pp. 12-19.
- —-. "La cara que pones cuando uno del público te pregunta: '¿Y cómo es que los cubanos escribíis ciberpunk si no tienen ni celulares?" 27 October 2017. Facebook post.
- Grau-Lleveria, Elena. "Mayra Santos Febres's *Cualquier miércoles soy tuya:* In Search of a Literary Tradition." *Revista de Estudios Hispánicos*, 2004, vol. 31, no. 13, pp. 3-15.
- Green-Simms, Lindsey B. *Postcolonial Automobility. Car Culture in West Africa*. University of Minnesota Press, 2017.
- Grosfoguel, Ramón. "Decolonizing Post-Colonial Studies and Paradigms of Political-Economy: Transmodernity, Decolonial Thinking, and Global Coloniality." *Transmodernity*, vol. 1, no. 1, 2011, pp. 1-37.
- Guthrie, Ricardo. "The *Real* Ghosts in the Machine: Afrofuturism and the Haunting of Racial Space in *I, Robot* and *Detropia." Afrofuturism 2.0: The Rise of Astro-Blackness*, edited by Reynaldo Anderson and Charles E. Jones, Lexington Books, 2016, pp. 45-60.
- Hallward, Peter. Damming the Flood: Haiti and the Politics of Containment. Verso, 2010.
- Holton, William Coffeen and S.M. Sze. "Semiconductor Device: Electronics." *Encyclopaedia Britannica Online*, 2009.

- Hopkinson, Nalo. "A Conversation with Nalo Hopkinson." *SF Site*, 2000, https://www.sfsite.com/03b/nh77.htm.
- —. Midnight Robber. Warner Books, 2000.
- Irizarry, Guillermo B. "Failed Modernity: San Juan at Night in Mayra Santos Febres's *Cualquier miércoles soy tuya*." *Unfolding the City: Women Write the City in Latin America*, edited by Anne Lambright and Elisabeth Guerrero, University of Minnesota, 2007, pp. 67-89.
- Jameson, Frederic. Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions. Verso, 2007.
- —. "Third-World Literature in the Era of Multinational Capital." *Social Text*, no. 15, 1986, pp. 65-68.
- Jones, Thomas. "William Gibson: Beyond Cyberspace." *The Guardian*, 22 September 2011, https://www.theguardian.com/books/2011/sep/22/william-gibson-beyond-cyberspace.
- Joyce, Patrick and Tony Bennett, eds. *Material Powers: Cultural Studies, History and the Material Turn.* Routledge, 2010.
- Kahn, Clea. "Introduction to the issue of state sovereignty and humanitarian action." *Disasters*, vol. 37, no. 2, 2013, pp. 139-150.
- Kelleher, John D. Deep Learning. MIT Press, 2019.
- Larkin, Brian. "The Politics and Poetics of Infrastructure." *Annual Review of Anthropology,* vol. 42, 2013, pp. 327-343.
- —. "Promising Forms: The Political Aesthetics of Infrastructure." *The Promise of Infrastructure*, edited by Nikhil Anand, Akhil Gupta, and Hannah Appel, Duke University Press, 2018, pp. 175-202.
- —. Signal and Noise: Media, Infrastructure, and Urban Culture in Nigeria. Duke University Press, 2008.
- Lenin, Vladimir Ilich. "Report On The Work Of The Council Of People's Commissars December 22." *Collected Works*, vol. 31. Translated by Julius Katzer, Progress Publishers, Moscow, 1965, pp. 461-534, https://www.marxists.org/archive/lenin/works/1920/8thcong/index.htm.

- Maguire, Emily. "El hombre lobo en el espacio: El *hacker* como monstruo en el *cyberpunk* cubano." *Revista Iberoamericana*, vol. LXXV, no. 227, April-June 2009, pp. 505-521.
- Maldonado, Adál. Puerto Ricans Underwater. 2016, Facebook post.
- Mars, Kettly. Aux frontières de la soif. Mercure de France, 2013.
- Marx, Karl. "Commodities." *Capital*, vol. 1. Translated by Samuel Moore and Edward Aveling, Progress Publishers, 1887. https://www.marxists.org/archive/marx/works/download/pdf/Capital-Volume-I.pdf.
- Medovoi, Leerom. "Swords and Regulation: Toward a Theory of Political Violence in the Neoliberal Moment." *Symploke*, vol 20, no. 1, 2012, pp. 21-34.
- Mota, Erick J. "El cyberpunk, una deconstrucción de la realidad: Apuntes sobre un posible "neociber-punk cubano." *Istmo: Revista virtual de estudios literarios y culturales centroamericanos*, no. 23, July-December 2011, pp. 1-15.
- —. *Habana underguater*. Atompress, 2010.
- —. *Habana underguater: Los propios rusos*. Author's Private Collection, Havana, 2010. Typescript.
- Moylan, Tom. *Demand the Impossible: Science Fiction and the Utopian Imagination*. Methuen, 1986.
- Munro, Martin. "Thirsting to Write: Kettly Mars's *Aux frontières de la soif* and the Haitian Post-Earthquake Novel." *New West Indian Guide*, vol. 88, 2014, pp. 1-17.
- Muñoz, José Esteban. *Cruising Utopia: The Then and There of Queer Futurity*. New York University Press, 2009.
- Nelson, Alondra. "Introduction: Future Texts." Social Text, 2002, vol. 20, no. 2, p. 1-15.
- Nixon, Rob. *Slow Violence and the Environmentalism of the Poor.* Harvard University Press, 2011.
- Nunan, Timothy. *Humanitarian Invasion: Global Development in Cold War Afghanistan*. Cambridge University Press, 2016.
- Núñez Leyva, Yanelys. "Artista cubano realiza stripper en el wifi de la calle 23." *Havana Times*, 7 diciembre 2015, https://havanatimesenespanol.org/diarios/yanelys-nunez/artista-cubano-realiza-stripper-en-el-wifi-de-la-calle-23/.

- Oliver-Smith, Anthony. "Theorizing Disasters: Nature, Power, and Culture." *Catastrophe and Culture*, edited by Susana M. Hoffman and Anthony Oliver-Smith, School of American Research Press, 2002, pp, 23-48.
- Orwell, George. 1984. 1949. Houghton Mifflin Harcourt, 1983.
- Osiander, Andreas. "Sovereignty, International Relations, and the Westphalian Myth." *International Organization*, vol. 55, no. 2, 2001, pp. 251-287.
- Parks, Lisa and Nicole Starosielski. *Signal Traffic: Critical Studies of Media Infrastructure*. University of Illinois Press, 2015.
- Pastor, Mara. "Hay una deuda." El libro de la promesa. Ediciones Alayubia, 2016, pp. 8-10.
- Pedreira, Antonio S. *Insularismo. Ensayos de interpretación puertorriqueña*. 1934. Edited by Mercedes López-Baralt, Editorial Plaza Mayor, 2001.
- Pels, Peter. "The Spirit of Matter: On Fetish, Rarity, Fact, and Fancy." *Border Fetishisms: Material Objects in Unstable Places*, edited by Patricia Spyer, Routledge, 1998, pp. 91-121.
- Pietz, William. "The Problem of the Fetish, I." *Anthropology and Aesthetics*, vol. 9, 1985, pp. 5-17.
- Polyné, Millery. "To Make Visible the 'Invisible Epistemological Order': Haiti, Singularity, and Newness." *The Idea of Haiti: Rethinking Crisis and Development,* Minnesota University Press, 2013, pp. xi-xxxvii.
- Price, Rachel. Planet/Cuba: Art, Culture, and the Future of the Island. Verso, 2015.
- Puerto Rico v. Sanchez Valle, 579 U.S. Supreme Court (2016).
- Puerto Rico v. Franklin California Tax-Tree Trust, 579 U.S. Supreme Court (2016).
- Puig de la Bellacasa, Maria. "Ecological Thinking, Material Spirituality, and the Poetics of Infrastructure." *Boundary Objects and Beyond: Working with Leigh Star*, edited by Geoffrey Bowker, Stefan Timmermans, Adele E. Clarke, and Ellen Balka, MIT Press, 2015, pp. 57-68.
- Quijano, Aníbal. "«Bien vivir»: entre el «desarrollo» y la descolonialidad del poder." *Des/colonialidad y bien vivir: un nuevo debate en América Latina*, edited by Aníbal Quijano, Universidad Ricardo Palma, 2014, pp. 19-33.

- —. "Colonialidad del poder y clasificación social." El giro decolonial. Reflexiones para una diversidad epistémica más allá del capitalismo global, edited by Ramón Grosfoguel and Santiago Castro-Gómez, Siglo del Hombre Editores/Universidad Central/Pontificia Universidad Javeriana, 2007, pp. 93-126.
- —. "El fantasma del desarrollo." *Revista Venezolana de Economía y Ciencias Sociales*, vol. 6, no. 2, 2000, pp. 73-90.
- —. "El «movimiento indígena» y las cuestiones pendientes en América Latina." *Nueva Época*, vol. 19, no. 50, 2006, pp. 51-77.
- Quintela, Carlos M., director. *La obra del siglo*. Rizoma Films, Uranio Films LTD, Ventura Film, Raspberry & Cream, 2015.
- Raymer, Michael G. *Quantum Physics: What Everyone Needs to Know.* Oxford University Press, 2017.
- Recio Ferreras, Eloy. "La enajenación lingüística en "La Guaracha del Macho Camacho," de Luis Rafael Sánchez." *Ceiba*, vol. 8, no. 13, 1984, pp. 59-78.
- "Reparations: Glasgow-Caribbean Centre for Development Research Begins Work." *Repeating Islands*, 13 January 2020, https://repeatingislands.com/2020/01/13/reparations-glasgow-caribbean-centre-for-development-research-begins-work/.
- Resolution 1542. United Nations Security Council, 30 April 2004.
- Ríos, Valeria de los. "La narrativa sonora de Luis Rafael Sánchez." *Atenea*, no. 503, 2011, pp. 83-91.
- Ríos Ávila, Rubén. La raza cómica del sujeto en Puerto Rico. Ediciones Callejón, 2002.
- Rodgers, Dennis and Bruce O'Neill. "Infrastructural Violence." *Ethnography*, vol. 13, no. 4, 2012, pp. 401-412.
- Rubenstein, Michael. *Public Works: Infrastructure, Irish Modernism, and the Postcolonial.* University of Notre Dame Press, 2010.
- Rubenstein, Michael, Bruce Robbins, and Sophia Beal. "Infrastructuralism." *MFS*, vol. 61, no. 4, 2015, pp. 575-586.
- Ryle, Gilbert. The Concept of the Mind. 1949. Routledge, 2009.

- Sánchez, Luis Rafael. *La guaracha del Macho Camacho*. 1976. Edited by Arcadio Díaz Quiñones, Cátedra, 2005.
- Santos Febres, Mayra. Cualquier miércoles soy tuya. 2002. Lima: Aerolíneas Editoriales, 2011.
- Scott, Ridley, director. Bladerunner. Warner Brothers, 1982.
- Sharpe, Catherine. In the Wake. On Blackness and Being. Duke University Press, 2016.
- Sheller, Mimi. Consuming the Caribbean: From Arawaks to Zombies. Routledge, 2003.
- —. "The islanding effect: post-disaster mobility systems and humanitarian logistics in Haiti." *cultural geographies*, vol. 20, no. 2, 2012, pp. 185-204.
- Shiner, Lewis. "Confessions of an Ex-Cyberpunk." *The New York Times*, 7 January 1991, p. A17.
- Smith, Eric. "The Only Way Out Is Through': Space, Narrative, and Utopia in Nalo Hopkinson's *Midnight Robber*." *Genre*, vol. 42, no. 1-2, 2009, pp. 135-163.
- Sorenson, Leif. "Dubwise into the Future: Versioning Modernity in Nalo Hopkinson." *African American Review*, vol. 47, no. 2-3, 2014, pp. 267-283.
- Sotomayor, Aurea María. *Hilo de Aracne: Literatura puertorriqueña hoy.* Editorial de la Universidad de Puerto Rico, 1995.
- Star, Susan Leigh. "The Ethnography of Infrastructure." *American Behavioral Scientist*, vol. 43, no. 3, 1999, pp. 377-391.
- —. "The Structure of Ill-Structured Solutions: Boundary Objects and Heterogeneous Distributed Problem Solving." *Boundary Objects and Beyond: Working with Leigh Star,* edited by Geoffrey Bowker, Stefan Timmermans, Adele E. Clarke, and Ellen Balka, The MIT Press, 2015, pp. 243-260.
- Sterling, Bruce. "Cyberpunk in the Nineties." *Interzone: Science Fiction and Fantasy*, no. 48, 1991, pp. 39-41.
- Stiglitz, Joseph and Mark Medish. "What the United States Owes Puerto Rico." *Wall Street Journal*, 15 August 2015.
- Sun Ra. *Space is the Place*. Directed by John Coney, produced by Jim Newman, Rhapsody Films, 1974.

- Sunstrum, Pamela Phatsimo. "Afro-mythology and African Futurism: The Politics of Imagining and Methodologies for Contemporary Creative Research Practices." *African SF*, edited by Mark Bould, Paradoxa, 2013, pp. 113-130.
- Szeles, Ursula. "Sea Secret Rising: The *Lwa* Lasirenn in Haitian Vodou." *Journal of Haitian Studies*, vol. 17, no. 1, 2011, pp. 193-210.
- Tao, Terence. "Phase Space." *Department of Mathematics*. UCLA, http://math.ucla.edu/~tao/preprints/phase_space.pdf.
- Thaler, Ingrid. "A Better Future? Ambiguity, Cyberpunk, and Caribbean Syncretism in Nalo Hopkinson's *Midnight Robber*." *Black Atlantic Speculative Fiction: Octavia E. Butler, Jewelle Gómez, and Nalo Hopkinson*. Routledge, 2010, 98-128.
- Ticineto Clough, Patricia, ed. *The Affective Turn: Theorizing the Social*. Duke University Press, 2007.
- Tineo, Gabriela. "Comunidad de experiencia y música popular en *La guaracha del Macho Camacho* de Luis Rafael Sánchez." *Iberoamericana*, vol. 2, no. 8, 2002, pp. 43-56.
- Tinsley, Omise'eke Natasha. *Ezili's Mirrors: Imagining Black Queer Genders*. Duke University Press, 2018.
- Toledano, Juan C. "From Socialist Realism to Anarchist Capitalism: Cuban Cyberpunk." *Science Fiction Studies*, vol. 32, November 2005, pp. 442-66.
- Trelles Hernández, Mercedes. "Muerto Rico: The Recent Portraiture of Adál." *The Common*, no. 16, 2018, https://www.thecommononline.org/muerto-rico-the-recent-portraiture-of-adal/.
- Trouillot, Michel-Rolph. "The Odd and the Ordinary: Haiti, the Caribbean, and the World." *Cimarrón*, vol. 2, no. 3, 1990, pp. 3-12.
- Turing, A.M. "Computing Machine and Intelligence." *Mind*, vol. 49, 1950, pp. 433-460.
- Ulysse, Gina Athena. *Why Haiti Needs New Narratives: A Post-Quake Chronicle*. Wesleyan, 2015.
- Varoufakis, Yanis. "The IMF confessed they immolated Greece on behalf of the Eurogroup." *Yanis Varoufakis: Thoughts for the Post-2008 World*, 29 July 2016, https://www.yanisvaroufakis.eu/2016/07/29/the-imf-confesses-it-immolated-greece-on-behalf-of-the-eurogroup/.

- "What is Nanotechnology." *Nanoscale Science, Engineering, and Technology Subcommittee,* https://www.nano.gov/nanotech-101/what/definition.
- Williams, Jennifer. "The Audacity to Imagine Alternative Futures: An Afrofuturist analysis of Sojourner Truth and Janelle Monáe's Performance of Black Womanhood as Instruments of Liberation." Phd thesis, Temple University, 2016.
- Wynter, Sylvia. "On How We Mistook the Map for the Territory, and Reimprisoned Ourselves in Our Unbearable Wrongness of Being, of Desêtre: Black Studies Towards the Human Project." *A Companion to African American Studies*, edited by Lewis R. Gordon and Jane Anna Gordon, Blackwell Publishing, 2006, pp. 107-118.
- Yaeger, Patricia. "Introduction: Dreaming of Infrastructure." *PMLA*, vol. 22, no. 1, 2007, pp. 9-26.