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UNIVERSITY OF CALIFORNIA SANTA CRUZ

DEMOCRACY AND DIGITAL TECHNOLOGY: INTERNET GOVERNANCE AND SOCIAL IN/EXCLUSION IN RIO DE JANEIRO

A dissertation submitted in partial satisfaction of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

ANTHROPOLOGY

by

Jeffrey Omari

September 2018

The Dissertation of Jeffrey Omari is approved:

Professor Donald Brenneis, chair

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Lori Kletzer Vice Provost and Dean of Graduate Studies Copyright © by Jeffrey Omari 2018

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Abstract Democracy and Digital Technology: Internet Governance and Social In/exclusion in Rio de Janeiro Jeffrey Omari

This dissertation employs 18 months of ethnographic research (i.e., experiencedbased social, cultural, and legal inquiry) to explore Brazil's new Internet Bill of Rights, the Marco Civil da Internet (MCI), and its impact on the poor and working class populations of Rio de Janeiro. Through its call for openness, promotion of Internet access as a civil right, and protection of net neutrality, the MCI seeks to advance democratic Internet governance in Brazil, a country known for its great social and economic inequality. Brazil has a population of approximately 210 million people and, as of 2016, roughly 95 million Brazilians lacked access to the Internet. This fact is relevant because Article 4 of the MCI promotes "the right of Internet access to all." By enacting the MCI, the Brazilian government has seemingly envisioned universal Internet access as a core feature of their attempt to overcome decades of societal inequalities and help achieve a more authentic democracy. As legislation, the MCI is a laudable model of democratic Internet governance. I argue, however, that the disjunctive nature of Brazil's democratic project reveals corresponding disjunctions in implementing the MCI's objectives. By examining the significance of Internet governance that attempts to advance civil rights through the promotion of Internet access, my work uses the Internet and digital technology as a lens to explore the meaning of democracy in the Brazilian context.

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CHAPTER ONE

Introduction

This dissertation employs an ethnographic¹ approach to explore Brazil's new Internet Bill of Rights, O Marco Civil da Internet (MCI) and its impact on the poor and working class populations of Rio de Janeiro. Through its call for openness, promotion of Internet access as a civil right, and protection of net neutrality, the MCI seeks to foster democratic Internet governance in Brazil, a country known for its great economic and social inequality. Brazil has a population of approximately 210 million people and, as of 2016, had an Internet penetration rate of 55 percent (Statista 2018). As of that year, roughly 95 million Brazilians were offline. This fact is relevant because this dissertation examines Article 4 of the MCI, which promotes "the right of Internet access to all." Through enacting the MCI, the Brazilian government has seemingly envisioned universal Internet access as a core feature of their attempt to overcome decades of societal inequalities and help achieve a more authentic democracy. As legislation, the MCI is a laudable model of democratic Internet governance. Yet, as I will argue, the disjunctive nature of Brazil's democratic project reveals corresponding disjunctions in implementing the MCI's objectives. By

¹ Here, I draw on a definition of ethnography championed by legal anthropologist Carol Greenhouse (2012) who argues, "Ethnography, in contemporary usage, does not [only] involve 'fieldwork' in the conventional sense, but always involves experienced-based inquiry into interpretative, institutional, and relational makings of the present" (2). By examining the institutional structures that promote the MCI, the relational possibilities created by the MCI's brand of democratic Internet governance, and the ways the MCI is interpreted by both policy makers and the poor, this dissertation is my attempt at such an experienced-based inquiry.

examining the significance of Internet governance that attempts to advance civil rights through the promotion of Internet access, my work uses information and communication technologies (ICTs – e.g., the Internet, social media, smartphones, etc.) as a lens to explore the meaning of democracy in the Brazilian context.

To pursue this line of inquiry, between 2012 and 2015 I conducted 18 months of ethnographic fieldwork in São Paulo and, primarily, Rio de Janeiro. During this time, I spent four months working as an affiliated researcher at the Center for Technology and Society (CTS) —a policy research center in Rio's Fundação Getúlio Vargas Direito (FGV Law School) - and countless hours conducting semi-structured interviews and participant observation in two disparate areas of Rio: Zona Norte (the North Zone) and Zona Sul (the South Zone). As I will discuss later in this introduction, the MCI is the result of a partnership between CTS and Brazil's Ministry of Justice. My work at CTS therefore put me in close contact with several of the legal scholars, researchers, and politicians who spearheaded the movement for the MCI. Researching at CTS thus aided my historical understanding of the MCI, helped me comprehend the political will necessary to draft and pass such a progressive Internet law, and informed my research question at that institution, namely: What political and legal factors influence the state's reliance on technological solutions to promote a more democratic society?

As I will discuss in Chapter 2, Rio's North and West Zones are generally deemed the poor, marginalized areas of the city. In Rio's North Zone, I spent myriad hours in *Complexo da Maré* —an immense favela with approximately 130,000

residents— and the surrounding *Naves do Conhecimento* (Naves) —digital inclusion centers located primarily in or near disenfranchised communities in the North and West Zones— conducting semi-structured interviews and participant observation with over 100 community organizers, digital activists, everyday favela residents, and users of Naves. Maré is one of the largest favelas in Rio. At the time of this research, it was the home of numerous NGOs, police and military occupation, and three rival drug factions (Ashcroft 2015). This complicated political climate made it an optimal location to examine the various and often contested favela interests at play regarding access to the Internet and its newfound status as a "civil right" under the MCI. Moreover, because Rio's ICTs are generally concentrated in the wealthier South Zone (Gaffney and Robertson 2016), Internet inclusion initiatives like the Naves represent a State-sponsored attempt to help bridge digital inequalities in North Zone communities.

In the South Zone —an area generally considered the wealthiest and most tourist friendly part of the city— I conducted participant observation and semistructured interviews with numerous South Zone residents, workers (i.e., those who lived in the North or West Zones but commuted to work at jobs in the South Zone), tourists, and vagrants to address my research questions in that part of the city: How have social marginality, urban exclusion, poverty, and privilege shaped current ideas of digital access?

Drawing from fieldwork in these divergent parts of Rio, this dissertation examines these research questions from three distinct aspects: (1) the impact of social

marginalization and exclusion on digital access, (2) Internet access in marginalized communities, and (3) net neutrality and its impact on access. I explore each of these areas as they relate to the MCI through the supplementary research questions that follow.

In its pledge to further Internet access for all, it is apparent that the MCI aims to promote Internet access in Brazil's marginalized communities. But just how do Brazil's disadvantaged citizens use, understand, and engage with ICTs? As it relates to citizens, how can Rio's marginalized residents expect a right to Internet access when their rights of democratic citizenship are often ignored? And how can the MCI's promise of access as a civil right further a more democratic society?

Net neutrality —the idea that all Internet traffic should be treated equally, without discrimination from its Internet service provider— is a topic that is increasingly salient both in Brazil and worldwide. In its promise of open and inclusive Internet access for all Brazilians, Article 9 of the MCI has strong net neutrality protections. But just how does net neutrality impact Internet access among Brazil's marginalized residents? What is "openness?" How does the MCI promote an open Internet? How is Brazil's recent tradition of *cultura livre* (free software) consistent with the open and inclusive aims of the MCI? And why is an open Internet crucial for democracy and equality in the online realm?

Finally, as we shall see through the lens of Rio, Brazil is in many ways a segregated and unjust society. Consequently, what is the relationship between digital inclusion and social exclusion? How can the City of Rio de Janeiro promote policies

that foster social exclusion while the MCI aims to advance democracy and digital inclusion? How can progressive legislation like the MCI help bridge such societal gaps, despite these contradictions?

These questions are all addressed here, chapter-by-chapter. But, before I delve into the substantive ethnographic chapters of this dissertation, this introduction must first set the stage by providing the necessary historical and political background. As legislation, the MCI aims to use the Internet and ICTs to advance civil rights and democracy. Democracy in Brazil is therefore an underlying theme throughout this dissertation. While the pages that follow contain plenty of hefty theoretical claims regarding citizenship, civil rights, and democracy in a localized Brazilian context, it is important to remember that Internet governance is both a national and transnational discourse. Hence, while the focus of this dissertation is Brazil and the MCI, at times I refer to the broader transnational debates informing ICTs and Internet governance, which helps provide context and situates Brazil within the more expansive framework of these conversations.

In keeping with anthropological convention, my point of departure is the following ethnographic anecdote, which will provide on-the-ground context for my claims about citizenship, democracy, civil rights, and the MCI that follow at the end of this introduction.

Brazil as a "False Democracy"

"Brazil is a false bureaucracy!" my Afro-Brazilian friend, Jeff, said to me in English as we walked down Rua Visconde Pirajá, just a block away from Rio's Ipanema Beach. Jeff was learning to speak English and he liked to "train," as Brazilians sometimes say, his developing language skills with me when we were together. Jeff was in the process of securing a passport. Since I was familiar with the bureaucratic turmoil that many Brazilians endure when handling any state-related administrative issues, his proclamation that Brazil was a "false bureaucracy" did not quite make sense to me. "Do you mean false democracy?" I asked. "Yeah, it's that too!" Jeff said, as he smiled and began to blush. I suspected that he was embarrassed because he realized that he could not clearly express what he meant in English. "No worries," I said laughingly, "Tell me what you mean in Portuguese."

That afternoon, I had stopped at the shoe store in Ipanema where Jeff worked. He was just getting off work and asked whether I wanted to accompany him to a nearby art gallery. I was free that day and always enjoyed talking to Jeff, so the walk gave us time to chat. Jeff was one of the first people I encountered in Rio. One day, a few weeks after I arrived in Brazil, I met him when I was looking for comfortable walking shoes. He could tell I was a foreigner and asked where I was from. I told him that I had just moved to Rio from California for research. Jeff spoke to me in broken English, so I knew he was Brazilian. In his early 20s, Jeff dressed with a hip-hop street style that was common in large cities in the U.S. He wanted to practice his

English and I needed help with my Portuguese. Our mutual interest in an *intercâmbio* (language exchange) and love for hip-hop culture created a warm bond between us.

Jeff had grown up with his father in a working class neighborhood known as Rio Comprido. After he turned 18, he moved in with friends and started taking graphic design classes at UFRJ, a public university in Rio. But Jeff was a b-boy and dancing was his true passion. You could often find him breakdancing on the streets of Ipanema, and his dancing was featured in the music videos of several Brazilian hiphop artists. His dream was to travel to New York City and find a way to earn a living as a dancer. Thus, he needed a passport.

Like many administrative necessities in Brazil, there is an incredible amount of bureaucracy involved in securing a Brazilian passport. Since Jeff was planning his first visit to the U.S., he had to endure the bureaucratic turmoil of applying for his first Brazilian passport, which led to our discussion that day. This day, Jeff had just returned from the passport agency and was frustrated. He explained to me how Brazil is often touted as a new democratic society.² Yet, according to Jeff, certain segments of the population are not treated in a democratic manner. As an example, Jeff summarized his experience with the passport agency by stating that administrative and governmental structures that are supposed to uphold the rights of Brazilian citizenry actually encumber the process, which ultimately makes life more difficult for some people in Brazilian society.

 $^{^{2}}$ As I discuss later in this introduction, Brazil experienced a military dictatorship from 1964 through 1985. When the dictatorship ended in 1985, the country held democratic elections and adopted a constitution in 1988. Hence, its democracy is relatively new.

Although Jeff tried to explain what he meant in English, I was only able to truly understand his message when he told me in Portuguese. "O Brasil é uma democracia falsa, mas a burocracia é forte." (Brazil is a false democracy, but the bureaucracy is strong.) Unbeknownst to Jeff, his claim that Brazil is a false democracy was similar to the scholarship of intellectuals such as James Holston (2008), Teresa Caldeira (2000), and Roberto DaMatta (1991), whose scholarly writings address similar theories of democracy in Brazil. For instance, DaMatta (1991) uses the term "Brazilian dilemma" to examine the unequal ways that laws are made and applied to marginalized populations in Brazil. According to DaMatta, "laws that are supposed to correct inequalities end up helping to legitimize and perpetuate them" (1991: 187). Meanwhile, Teresa Caldeira and James Holston (1999) employ the idea of Brazil as a "disjunctive democracy" to refer to the various forms of violence and injustice that weaken the civil components of democratic citizenship. Caldeira and Holston suggest that the vast majority of Brazilian citizens "cannot rely on institutions of the state —particularly the courts or the police— to respect or guarantee their individual rights" (1999: 716). Yet, along with this scholarship, I would often reflect on my conversation with Jeff that day when contemplating the theoretical framework of this dissertation. If these scholarly theories on Brazilian democracy are indeed true, as Jeff's claims indicate, how can the MCI fulfill its pledge to advance democracy and civil rights through Internet access and governance?

Although Jeff grew up in a working-class family, he was from the Rio's North Zone³ and as a young black man he understood the complicated racial and class dynamics of Rio de Janeiro. When I asked Jeff which segments of the population experience the brunt of Brazil's false democracy, he told me it was clearly the dark-skinned, the poor, and especially *os pobres dos mais pobres* (the poorest of the poor).

The Brazilian "Other"

In Brazil, the dark-skinned, the poor, and *os pobres dos mais pobres* often live in communities called *favelas* —shantytowns or slums located in or near large cities. When I decided on Rio as a field site, I did not want to write a favela ethnography. It seems like favelas have been the focal point of almost every anthropological study of Brazil that I have read. Most of these ethnographies consist of a foreign anthropologist (usually from Europe or the United States) setting up shop in a favela for an extended period of time to study life in these communities, the people that live there, violence, poverty, social exclusion, or some similar trope. What bothered me about these studies is not just the asymmetrical power dynamics at play but that the anthropologist conducting the study was usually of European descent and their object of study was the black or brown people who predominantly occupy these communities. Historically, this is the quintessential example of an anthropological study where the Westerner goes off to a foreign land to study the "other." Although

³ The significance of Rio's geographic makeup, including the socioeconomic features that distinguish between its North, West, and South Zones, is discussed in Chapter 2 of this dissertation.

this model represents the standard upon which the discipline was built (for critiques of this model see Nader 1972; Lewis 1973; Said 1979; Clifford and Marcus 1986; Trouillot 1991), it never quite resonated with me.

Perhaps it's because this model embodies the minimal definition of anthropology that William S. Willis, Jr. notes as "the social science that studies dominated colored peoples —and their ancestors— living outside the boundaries of modern white societies" (1972: 123). Or, perhaps, it's because of my upbringing. I grew up as the youngest of four, and the only boy, of a middle class black family from south suburban Chicago; my mother was a Chicago public schoolteacher and the rock of our family. She saw firsthand the perils of inner-city life and sent all of her four children to private school to shield us from its risks. After seeing my mom struggle to keep us out of the ghetto all those years, it seemed foolish to travel to another country and live in a favela because, in many ways, those communities endure the conditions that my mom struggled so hard to shield me from throughout my youth. And yet, during the course of my fieldwork in Brazil, I encountered several white, North American ethnographers who were indeed living and researching in favelas. In fact, many times these ethnographers questioned me about why I too was not living in the favela, given the nature of my work about Internet access and governance in disadvantaged communities. The truth is that I could have easily written a favela-centric ethnography, given the topic of my research and the fact that about one-third of Rio's six million residents live in the city's favelas (Ruvolo 2014). Because the country's socioeconomic orbit maps very closely to its legacy of chattel

slavery (Skidmore 1990; Caldeira 2000; Telles 2006; Holston 2008), the sad truth is that many favela residents are the descendants of the five million African slaves whom Brazil imported during the transatlantic slave trade. Hence, in Brazil, the subaltern "other" is generally thought to be the predominantly black and brown residents of its favelas. But, while I chose not to live in the favela for both personal and political reasons, many of my experiences in these communities, and interactions with their residents, help to shape the ideas I convey herein.

Inequality and Internet Access

Social and economic inequality affects Internet access (Sylvain 2016). In Brazil and across the globe, the Internet is considered the premier telecommunications platform shaping contemporary public life and, as legal scholar Olivier Sylvain (2016) suggests, exclusion from its affordances is "either an act of defiance, ignorance, or the consequence of material misfortune and disadvantage" (2016: 447). And while Rio's favelas are rife with material misfortune, disadvantage, and inequality, understanding how a decree advancing the democratic right to Internet access helps mitigate such inequalities is one of the goals of this dissertation. One such decree is the MCI, Brazil's new "civil rights framework" for the Internet. As it pertains to the MCI, the right to Internet access refers to both "digital access —having access to the Internet— and digital inclusion —knowing how to use the Internet" (Patry 2014). Therefore, as referred to herein, the "right of Internet access" refers to the ability to freely exercise and enjoy freedom of expression and association in the context of digital technologies. Moreover, as endorsed by the MCI, included with these rights and freedoms is the responsibility of states and governments to ensure that Internet access is broadly available and to prevent unreasonable state restrictions of such access.

Although Internet access is almost ubiquitous among the wealthiest Brazilians, as of 2014 only one third of Brazil's middle class and 6% of Brazil's poorest citizens had access (Patry 2014). However, the impact of digital access in marginalized communities is merely one aspect of this study of how the MCI impacts the Rio's poor and working class. This dissertation also explores Internet access through the technical lens of the MCI's net neutrality protections and looks at how access impacts social exclusion in Rio. But because "Internet Bill of Rights," as the MCI is known, is also about furthering democracy in Brazil, this work uses the MCI as a tool to study Brazilian democracy, with the Internet and ICTs serving as the focal points to purse the investigation.

Gateway to the Web

Anyone remotely familiar with Brazil's Internet history will tell you that all things online started with Orkut —the social media network launched by Google in 2004 (Ruvolo 2014). Similar to other popular social networking sites like MySpace and Facebook, Orkut provided users with a digital platform to meet and keep in touch with friends and family. Internet pioneer John Perry Barlow —who at that time was working with Brazil's minister of culture, the musician Gilberto Gil— was one of the Orkut's first invitees. In many ways, Barlow and Gil were visionaries of digital culture in Brazil; they worked together to establish an Internet music repository that might one day contain "every Brazilian song ever recorded, all downloadable for free" (Dibbell 2004). Because of his ties to the Brazilian Internet community, Barlow gifted all 100 of his Orkut invites to his Brazilian friends and colleagues. By 2006, just two years after the platform's introduction, Brazil —a country of approximately 210 million people— had 14 million people online, with an astounding 11 million of those Internet users having Orkut profiles⁴ (Ruvolo 2014).

The reasons for Orkut's popularity in Brazil are not clear. What is clear, however, is that "Brazilians are arguably the most hyper-social people on the Internet" (Ruvolo 2014), so much so, that *The Wall Street Journal* dubbed Brazil "The Social Media Capital of the Universe" in 2013 (Chao 2013). Because of increased competition from other social media networks, Google shut down Orkut in 2014 (Ruvolo 2014). Orkut's popularity in Brazil laid the country's foundation for other social media platforms like Facebook, which as of 2018 is forecast to have roughly 90 million users in Brazil —a country with 123 million total Internet users (Statista 2018). As a result, almost three fourths of Brazil's Internet users regularly use Facebook. Facebook is thus an essential social media platform in Brazil now, as I discuss in Chapter 4. However, for Brazil's early Web users, Orkut was the gateway to the Internet.

⁴ By way of comparison, in the United States there were 206 million people online in 2006, but only 28 million U.S. citizens were using social media networks in that year (Statista.com).

My own gateway to the Internet in Brazil came after conducting a legal study about copyright law in 2009 (Omari 2010). At that time, I discovered the work of a Brazilian law professor named Ronaldo Lemos from the Center for Technology and Society (CTS) at Fundação Getúlio Vargas (FGV) Law School in Rio. In a widely read 2007 editorial, Lemos established the basis for Internet governance by arguing that lawmakers could not define crimes on the Internet in Brazil's criminal code without acknowledging the corresponding rights and responsibilities of individual citizens, businesses, and governmental bodies (Lemos 2007). To develop this concept, Lemos and a team of researchers from CTS partnered with Brazil's Ministry of Justice to begin drafting the legislation that would become the MCI. This project on Internet governance piqued my interest because it encompassed my previous legal work on copyright and intellectual property (IP) in the online realm, but it was also much broader in that it promotes democratic Internet governance and addresses an array of digital issues, including Internet access, net neutrality (which also impacts access), online privacy and security concerns, and generally regards citizens' digital rights as human rights.

Lemos, along with the other scholars, legislators, and civil society representatives tasked with crafting Brazil's Internet law, became known as *O Comitê Gestor da Internet* (The Brazilian Internet Steering Committee or CGI). The CGI sought to establish the fundamental guidelines necessary for maintaining a free and open Internet, which fosters continuous innovation, economic and political development, and a strong, culturally vibrant civil society (Arnaudo 2017). Since

Internet governance is a "multilayered system of administration and operational oversight" (DeNardis 2009: 226), the principles of Internet governance developed by CGI were the result of a multistakeholder process —an approach where a range of experts from diverse areas of society participate to meaningfully respond to the governance issues presented. Thus, at both the local and global levels, no individual entity is responsible for Internet governance in its entirety.

In 2009, with the hopes of advancing an Internet law that would provide a

free, open, and robust network, promote security, advance economic development,

and strengthen civil society (Arnaudo 2017), the CGI introduced the 10 guiding

principles of Internet governance. These principles would go on to inform and inspire

legislation that would eventually become the MCI (Glaser 2014; Arnaudo 2017). As

outlined by the CGI website (Glaser 2014), the principles are outlined as follows:

1. *Freedom, privacy, and human rights*: The use of the Internet must be driven by the principles of freedom of expression, individual privacy and the respect for human rights, recognizing them as essential to the preservation of a fair and democratic society.

2. *Democratic and collaborative Internet governance*: Internet governance must be exercised in a transparent, multilateral and democratic manner, with the participation of the various sectors of society, thereby preserving and encouraging its character as a collective creation.

3. *Universal Internet access*: Access must be universal so that it becomes a tool for human and social development, thereby contributing to the formation of an inclusive and nondiscriminatory society, for the benefit of all.

4. *Diversity*: Cultural diversity must be respected and preserved and its expression must be stimulated, without the imposition of beliefs, customs or values.

5. *Innovation*: Internet governance must promote the continuous development and widespread dissemination of new technologies and models for access and use.

6. *Network neutrality*: Neutrality of the network Filtering or traffic privileges must meet ethical and technical criteria only, excluding any political,

commercial, religious and cultural factors or any other form of discrimination or preferential treatment.

 Unaccountability of the network: All action taken against illicit activity on the network must be aimed at those directly responsible for such activities, and not at the means of access and transport, always upholding the fundamental principles of freedom, privacy and the respect for human rights.
 Functionality, security, and stability: The stability, security and overall functionality of the network must be actively preserved through the adoption of technical measures that are consistent with international standards and encourage the adoption of best practices.

9. *Standardization of interoperability*: The Internet must be based on open standards that facilitate interoperability and enable all to participate in its development.

10. *Legal and regulatory environments*: The legal and regulatory environments must preserve the dynamics of the Internet as a space for collaboration.

In 2011, a bill based on these principles was introduced for consideration to

the Brazilian legislature. But, because Brazil's telecom lobby challenged the bill's

provisions on net neutrality (Arnaudo 2017), corporate data retention, and

intermediary liability, the MCI was held up in the Brazilian Congress for a few years.

However, it was made a constitutional priority by the Brazilian government after the

Edward Snowden disclosures regarding US espionage. These disclosures revealed

that the U.S. had indeed been conducting high-level spying campaigns on Brazilian

executives and government officials (Arnaudo 2017). Former Brazilian President

Dilma Rousseff harshly criticized this U.S. spying in a September 2013 address to the

UN, calling it a breach of democracy and international law. Motivated by these

spying disclosures, the Brazilian government finally enacted the MCI in April of

2014. When the bill was formally signed into law at the inaugural NETmundial⁵ meeting in São Paulo, Dilma signaled to the world that the Brazilian government considered the MCI not only a structure for Internet governance in Brazil, but also hoped that the law's principles would be adopted more broadly by other countries throughout the world (Soares 2014). Thus, while the MCI seeks to address national issues of democracy and inequality in Brazil, it also speaks to broader, transnational issues of global Internet governance. From both a global and local perspective, understanding the dynamic political landscape in Brazil helps us understand the MCI's past and may be key to forecasting the law's future.

Political Background and Climate

While it is difficult to overstate the sense of national pride that Brazilians feel for their homeland, many Brazilians disdain the recent wave of corruption that has engulfed the country's political sphere. The movement to combat such corruption was hitting full stride during the course of my fieldwork in Brazil. The passion and rage elicited during discussions about Brazilian politics was never far from the surface, as was made clear by the time I spent with Rosangela. I traveled to São Paulo in March 2015 to attend a conference on the MCI and stayed at Rosangela's home during my weeklong visit. I had met Rosangela's daughter, Carol, in Santa Cruz before I left for fieldwork. When I told Carol that I would soon be leaving California for a year of

⁵ The NETmundial Initiative is an NGO that consists of a global, multistakeholder network of academics, politicians, and activists that seek to create a collaborative platform for worldwide Internet governance issues.

fieldwork in Brazil, she suggested that I contact her mom if I visited São Paulo. Carol told me that I could even stay in her room at Rosangela's house if I needed a place to sleep while in São Paulo.

I took the bus from Rio to São Paulo and arrived at the Butantá station near Rosangela's home late one afternoon. Although it was not my first time in São Paulo, I was unfamiliar with Butantá, a neighborhood near the University of São Paulo (USP). Like Rio, São Paulo is littered with favelas, and the neighborhood near USP was no exception. Rosangela's neighborhood felt fairly safe, however, and I felt comfortable walking from the bus station to her home. Rosangela was in her late 50s at the time and lived with her husband, Osvaldo, who was about 10 years her junior. Osvaldo taught English and sold baked goods at a local market. They had a small two-bedroom apartment in the middle class neighborhood near the university.

During this time, the *lava jato*⁶ (car wash) probe was underway and there was intense political pressure calling for the impeachment of then-president Dilma Rouseff (known simply as "Dilma") because she was implicated in the *Petrobras*⁷ investigation. As is the tradition when there is political scandal in Brazil, whenever Dilma spoke publicly, many citizens would engage in *o panelaço* —a popular form of

⁶ Operação Lava Jato (Operation Car Wash) is the name of an ongoing federal criminal investigation in Brazil. The probe initially involved money laundering, but has morphed into an expansive investigation involving *Petrobras*, Brazil's largest public oil company headquartered in Rio de Janeiro. Executives from the oil company allegedly accepted bribes in return for rewarding inflated contracts to several of Brazil's largest construction firms. Because the investigation challenges a long system of impunity for the elite, the corruption scandal has grown to implicate many of the most prominent politicians and executives in Brazil and Latin America more broadly.

⁷ See footnote 6 above.

public protest where residents bang on pots and pans to display their political displeasure. Although the *panelaço* generally occurs inside the home, the noise from the banging coupled with the vast numbers of people participating in the demonstration creates a disturbance that can clearly be heard throughout entire neighborhoods. The banging inspired by these protests often has a snowball effect, gaining intensity the longer the protest continues. The *panelaço* is thus noise as politics; the apparent intent of the protest is to drown out the voice of the speaker. When Dilma spoke publicly, I would often hear the *panelaćo* in Copacabana, Ipanema, and other neighborhoods in Rio's South Zone. Yet, the *panelaćo* is not specific to Rio and occurs in cities throughout Brazil, as I discovered during my time in São Paulo.

Rosangela and Osvaldo usually ate dinner together each evening, and, since I was a guest in their home, I was expected to do so as well. However, Butanta is not close to the business district of São Paulo, where the conference was being held, and it was extremely difficult for me to return to her home each evening in time for dinner. On the last night of my weeklong stay at Rosangela's home, I finally returned to her apartment in time to share an evening dinner with them. Although I was not eating dinner with Rosangela and Osvaldo each evening, I did generally return to their home in time to chat with them before bed. It was during these nightly chats, and during dinner on my final evening at their home in São Paulo, that I really came to

understand their passion for their country and the deep gratitude they shared for the policies implemented by the Worker's Party⁸ (commonly known at the PT).

During dinner on that final evening, inspired by one such *panelaço* outburst that occurred earlier that day, I asked Rosangela how she felt about the controversy surrounding Dilma and the current political climate in Brazil. Like Dilma, Rosangela was also from Belo Horizonte the capital of the state of Minas Gerais in southeastern Brazil. But while Dilma had an upper middle class upbringing, Rosangela came from poorer working class roots. Still, Rosangela respected Dilma and the patriarchal barriers she broke to become Brazil's first woman president. Rosangela's pale brown face became red with passion and even anger when speaking about the Dilma's predicament. She said that she views the recent protests against Dilma as solely supported by conservatives who are unhappy about the progress that the poor have made under former President Luis Inácio Lula da Silva⁹ and Dilma. She told me that she feels these elite conservatives merely want to maintain their stature in terms of wealth and power relations in Brazil. Tears swelled in Rosangela's eyes and she apologized for becoming so emotional. She assured me, however, that her concern comes from a place of love for her country and for Brazil's downtrodden. Her feelings about the class distinctions that underlie the push for Dilma's removal mirror

⁸ *O Partido dos Trabalhadores*, also known as the Worker's Party or PT, is a leftist Brazilian political party that launched in 1980. Former Brazilian President Luis Inácio Lula da Silva is the most prominent member of the party and Lula's presidential successor Dilma Rousseff is also a member.

⁹ Inácio Lula da Silva, known widely as "Lula," is a Brazilian politician, a founder of the Worker's Party (see footnote 6), and unsuccessfully ran for president three times before being elected to serve as the country's president in 2002. After being reelected in 2006, he served for two consecutive terms (2003-2011).

those of several other middle-aged, working-class Brazilians I encountered while working at Ipanema Hippie Fair in Rio.

Generational Perspectives

"O Brasil é o pais de merda!" (Brazil is a country of shit) Benigno told me one day as we were discussing politics at the Hippie Fair. During my time in Brazil, I worked with Benigno every Sunday at the Hippie Fair in Ipanema, which gave me a chance to get to know him and the other working-class Brazilian vendors who sold their arts and crafts at the fair each week. Benigno was 66 years old at the time and for the last 30 years, he has made large, handcrafted wooden sculptures that he sold at the Fair. Every Sunday morning without fail, he would load a trailer filled with his sculptures and hitch it to the back of his old, creaky Datsun 200B. He would then drive from his home in Pedra de Guaratiba —a small coastal town about 50 kilometers south of Ipanema— early enough to arrive at the Hippie Fair and set up his booth by the Fair's 7a.m. start time. Similar to my conversation with Rosangela in São Paulo, a recent television appearance by Dilma and its corresponding panelaço was the driving force behind our discussion of politics at the Hippie Fair that week. When I asked Benigno why he felt that Brazil was a country of shit, he told me that it's obvious that politics make Brazil a miserable place. Benigno was familiar with Dilma's history of activism during the military regime and clearly respected her pedigree. He suggested that when good politicians like Dilma become corrupt, the country has nowhere to go but down. "But how do you know she's guilty?" I

interjected. "It's obvious," he stated. "Have you seen the television? Do you watch the news?" he asked, as if those sources were irrefutable. But despite his condemnation of Dilma and her alleged misdeeds while in Brazil's highest office, Benigno was still opposed to her impeachment. "It will do the country no good," Benigno insisted. "Who's going to take her place?" he added rhetorically.

Middle-aged Brazilians like Rosangela and Benigno are indeed old enough to remember Brazil's military dictatorship¹⁰ and the authoritarian regime that accompanied it. In São Paulo, Rosangela told me that her political passions stem from her memories of the military regime and the hardships her family and friends encountered during that time. Similarly, in Rio, Benigno's memories of the military dictatorship and the distress that accompanied it clearly influenced his current political convictions. Although they may think Dilma was guilty of some form of corruption, many older, working-class Brazilians like Rosangela and Benigno respect the work of Dilman and Lula (her predecessor) and appreciate the progress made by the poor and working-class while the PT was in power. Moreover, because there was not a clear successor who had earned their trust, neither Rosangela nor Benigno supported Dilma's removal from office or the corresponding push for conservative power.

The political perspective of Rosangela, Benigno, and the other older, workingclass Brazilians I met differs dramatically from two of my younger, upwardly mobile

¹⁰ From 1964 until 1985, an authoritarian military dictatorship ruled Brazil. The dictatorship began with a coup led by the Brazilian Armed Forces and was supported by the United States State Department. While in power, the military regime suppressed freedom of speech and stifled all forms of political opposition.

Paulistano interlocutors. Daniel and Bruna were engaged while living and working in São Paulo. I initially met Daniel at a hostel in Ipanema during my first visit to Rio in 2012. He was in Rio for a physical therapy conference. At the time, Daniel's English was better than my Portuguese and we were both eager to learn the other's native language. We got along well and there was a mutual respect between us so, like most good Brazilians do, we kept in touch via Facebook. Outside of Rosangela, Daniel was one of the few people I knew in São Paulo, and I knew I could count on him when I went there to visit.

Daniel was born and raised in São Paulo, while Bruna hails from Minas Gerais, a Brazilian state in southeastern Brazil. Daniel was 28 and still lived with his mom and dad in São Paulo. According to Daniel, São Paulo is a very expensive city in which to live. He hoped to continue living with his family until he saved enough money to buy his own place. Bruna was 26 and had moved to São Paulo from Minas Gerais when she was 19. She lived in São Paulo's swanky Vila Madalena neighborhood. Daniel and Bruna, both licensed physical therapists, had met when they were in school studying for their certifications.

While Daniel and Bruna both love their country, they expressed frustrations with Dilma and the current climate of political corruption and scandal in Brazil. In 2013, several Brazilian cities raised their bus fares, setting off massive nation-wide protests about the use of public funds for major sporting events¹¹ rather than for things like health, education, and public transportation. Although Daniel and Bruna

¹¹ Several cities across Brazil hosted the 2014 World Cup. Meanwhile, the City of Rio de Janeiro hosted the 2016 Olympics.

both had cars and rarely used public transportation, they seemingly equated their high income tax bills to the high bus fares of their low-income Brazilian counterparts. They mentioned that they don't mind paying high taxes for the benefit of their country, but they become frustrated and will not tolerate their tax dollars being appropriated solely for the benefit of the political elite. Both Daniel and Bruna suggested that they were in favor of Dilma's impeachment. "What about all the poor Brazilians that Dilma and the PT have helped guide out of poverty? Shouldn't they receive some credit in that regard?" I asked. Daniel and Bruna both remained quiet, as if they were unmoved by my question. However, when I asked them specifically about their feelings regarding Dilma, Bruna spoke up, passionately stating that she had lost faith in Dilma based on her belief that Dilma had misappropriated funds. "Who should succeed Dilma?" I asked Bruna, remembering that the lack of a sound successor impacted Rosangela's and Benigno's thoughts on impeachment. "It doesn't matter," Bruna claimed. "If she's broken the law, she must go!" Bruna stated. Unlike Rosangela and Benigno, who were clearly concerned about who might follow Dilma, Bruna's only consideration was for the rule of law. And while Rosangela and Benigo clearly relied on their recollection of Dilma's opposition to the military dictatorship to cling to support of the embattled president, Daniel and Bruna were of a younger generation and apparently lacked this national memory. During the course of my nearly 18 months of fieldwork, Daniel and Bruna were the only Brazilians I knew personally who were in favor of Dilma's impeachment.

Compared to the working-class backgrounds of Rosangela and Benigno, Daniel and Bruna came from much wealthier families. As Rosangela suggested during our dinner in São Paulo, it appears that Brazilians with poor and working classes backgrounds generally favor PT leadership, while upper class Brazilians tend to shun the PT in favor of more conservative rule. Indeed, the contrast between the liberal political leanings of Rosangela and Benigno versus the more conservative ideology of Daniel and Bruna reminds me of a saying that I frequently heard during fieldwork: "In Brazil, the poor people blame the country's problems on the corrupt rich people and the corrupt rich people blame the lazy poor people." The class issues that underlie this apparent conflict fuel Brazil's socioeconomic inequality and were also the driving force behind the rise of the Workers Party.

The Workers' Party

Understanding the history of the Workers' Party (or PT) is one of the keys to understanding how the MCI became the legislation that it is today. Established under the tenets of democratic socialism during the final years of Brazil's military dictatorship in 1980, the PT was founded by a diverse group of militants —left-wing academics, artists, and trade unionists— who were opposed to the military government (cite). Lula, a former trade unionist himself, was a founding member and ran for Brazil's highest office three times under the PT banner before his presidential breakthrough in 2002. Through a campaign that stressed alleviating the longstanding state of poverty and despair experienced by the vast majority of Brazilian people,

Lula won the hearts of the masses by pledging to eliminate hunger through his *Fome Zero* (Zero Hunger) program (Castro and Carvalho 2003), which included the wildly popular *Bolsa Familia* –a "Family Allowance" initiative offering financial incentives to fight hunger– and *Minha Casa, Minha Vida* (My House, My Life), which provided housing and education to low-income families.

In addition to his promise to curb socioeconomic inequalities, Lula's administration insisted upon fiscal restraint, controlling inflation, and advancing freemarket exchange (Castro and Carvalho 2003). In many ways, then, Lula's policies exhibited the neoliberal characteristics of that era and can be described as "economic pragmatism with a human face... accompanied by an effort to renew foreign policy so that it may become an adequate external support for domestic aspirations of social and economic development" (485). By appealing to Brazil's poor through his pledge to end hunger and by enticing local and international business with his free market promises, Lula showed the savvy necessary for his own political success and for the sustained success of the PT. At the same time, Lula's administration also embraced nonproprietary IP strategies that advanced the free software approach of the emerging digital era (Shaw 2011). As I will argue in Chapter 4, the support of free software ideologies by the Lula administration shows the PT's innovative values in matters of ICTs. These same technological values were at the core of its push for the MCI under the presidency of Lula's successor, Dilma Rousseff.

Dilma Rousseff

Lula's national success with inclusive policies like *Fome Zero*, along with his ability to temper the discourse of these institutional provisions and appeal to international markets, paved the way for his successor, Dilma Rousseff. Because Brazil has a long tradition of patriarchal hierarchies (Freyre 1964), the significance of Dilma's election as the first woman president cannot be overstated. Although Dilma was from an upper middle class family, her background as a socialist guerilla who was captured and tortured while fighting against the military dictatorship in the 1970s endeared her to the masses of Brazil's poor and working class. This background made for an ideal alliance when she teamed with Lula and the PT in 2000.

During Lula's presidency, Dilma was among the PT's elite and served as Lula's Chief of Staff in the years immediately preceding her presidential election in 2010. She was narrowly elected to a second term in 2014. However, as with many high-level Brazilian politicians and executives during this era, Dilma would be caught in the broad web of the *lavo jato* investigations.

During these investigations, allegations surfaced regarding a wide range of corruption at the Brazilian oil company, *Petrobras*. Because Dilma was a board member of *Petrobras* during the time of the alleged corruption, she became a subject of the ongoing inquiry. While no direct evidence implicating Dilma in the *lavo jato* has been made public, her presidency was suspended in April 2016 —just two years after she signed the MCI into law— when the Brazilian Congress voted impeach her on charges of manipulating the country's budge (Watts 2016). At the conclusion of

the trial, in August 2016, the Brazilian Senate voted in favor of her impeachment for breaking budgetary laws. Dilma's vice president, Michel Temer (discussed in the next section) was subsequently sworn in as Brazil's next president.

Many Brazilians consider Dilma's impeachment a coup through legal mechanisms (Watts 2016; Democracy Now 2018). Yet, from a historical perspective, the irony of Dilma's impeachment is visceral. As Rosangela told me in São Paulo, "I never imagined that a woman could be president of Brazil!" In many ways, however, the country could not move beyond its patriarchal roots. At Dilma's impeachment proceedings, for instance, Dilma's conservative congressional opposition shouted sexist slogans and held condescending signs that read "Tchau querida!" -Goodbye dear— (Watts 2016). When I learned that the instigator of Dilma's impeachment trial, Eduardo Cunha,¹² currently sits in prison, convicted and sentenced to 15 years in prison for tax evasion and money laundering in the lava jato investigation, I could not help but think of Jeff's proclamation that Brazil is a "false democracy." Dilemmas such as these are deeply ingrained in various aspects of Brazilian society, including law, culture, and politics, and ultimately impact the country's democratic form of government. By examining the MCI's attempt to advance civil rights through Internet governance, this dissertation explores many of the dilemmas of Brazilian democracy.

Dilma Rousseff, Brazil's first woman president was formally impeached and removed from office on August 31, 2016 (Maynard and Sich 2016). In May of 2016,

¹² Eduardo Cunha, a conservative politician and evangelical Christian, was the President of Brazil's Chamber of Deputies before resigning amidst corruption charges in the midst of the *lava jato* investigation in 2016. Before his resignation, he championed the push for Dilma's impeachment.

on her final day in office,¹³ Dilma signed a decree that broadly implemented the norms of the MCI (Arnaudo 2017). Although the MCI had been signed into law two years earlier in April 2014, the Brazilian government took its time to determine how the legislation would best be applied and regulated. The culmination of that process was Dilma signing the May 2016 decree amidst the turmoil of her forthcoming impeachment proceedings, an action that shows that the MCI was highly regarded by both Dilma and the PT.

Dilma's removal from office meant the end of the PT's 13-year reign atop Brazil's highest office, a time when PT policies like *Fome Zero* uplifted the country's economy and raised millions out of poverty (Scott 2018). After Dilma's impeachment, vice president Michel Temer took office. Temer, a member of the Brazilian Democratic Movement Party (PMDB), swiftly implemented harsh austerity measures that countered many of the progressive PT initiatives aimed at mitigating inequality. Budgets for programs like *Minha Casa, Minha Vida* and *Bolsa Familia*, that improved the lives of many impoverished Brazilians were slashed or cancelled outright (cite). The shift in governmental policies indicates fundamental differences between Temer and those of his predecessor. As of now, the MCI remains intact legislatively. But because Brazil will elect a new president in October 2018, the future of the MCI is currently unclear.

¹³ To be clear, Dilma was officially removed from office on August 31, 2016; she was suspended from her presidential duties at the commencement of her impeachment trial in May 2016.

Brazil, Democracy, and the MCI

While the MCI's future may be uncertain, the law itself provides an ideal subject for anthropological study on various levels. On an international stage, the MCI offers a framework in which to investigate transnational discourses of democracy, dependency relations between the West and Global South, and the ways in which the Internet's interconnected global infrastructure redefines state sovereignty. These themes tie into the ten principles of Internet governance discussed above. For example, the first two principles relate to valuing both human rights and collaborative, democratic Internet regulations. Because the Internet is a global telecommunications network, it must inherently transcend international boundaries. At the same time, countries are sovereign territories and have laws that must be respected. Democratic Internet laws must therefore strike a balance between maintaining the transnational function and integrity of the Web itself, while also respecting the domestic laws of countries as sovereign territories. Additionally, as I discuss in Chapter 4, technological innovation can affect the dependency relationships that exist between core countries and the periphery (Vernengo 2005). For these reasons, the balance between national and international concerns is always at the forefront of Internet governance.

This dissertation often references these broader transnational debates in order to provide context and situate Brazil's local and national Internet governance conversations within their larger international framework. Yet, because the MCI is grounded in discourse that promotes democracy and human rights within Brazil, the

focus here is specifically on the MCI's impact on the poor and working-class populations of Rio de Janeiro. Consistent with the MCI's provisions on Internet access as a civil right, protecting net neutrality, furthering diversity, and advancing democracy and human rights, I investigate how Internet access unfolds in Rio's urban favelas, the implications of net neutrality on Internet access for Rio's disadvantaged, how access affects social exclusion, and the correlation between local ideas of Internet governance and civil rights.

Underscoring this topical theme of democracy, this is also, more broadly, an ethnography of common scholarly discourses that often have uncommon characteristics in the Brazilian context: patriarchy, poverty, social exclusion, race, class, violence, neoliberalism, power, intellectual property, and law. The emphasis on Brazil in my analysis is particularly significant because of the locations in which I am working. I conducted fieldwork in São Paulo and, primarily, in Rio de Janeiro, two urban metropolises that Saskia Sassen (2001) might refer to as "global cities." As defined by Sassen, these are cities where, due to the ascendance of information technology and the corresponding increase in the mobility and liquidity of capital, the world economy situates itself. Because of their relation to both the global and the local, global cities are important sites to the cities themselves, the nation-state, and international legal, economic, and political systems. Accordingly, just as the MCI was enacted because of global political discourse surrounding Internet law and governance, it is also relevant for the study of democracy and civil rights at the local, national, and international levels. While Rio and São Paulo are both important

business, political, and economic centers globally, they are also key locations for the study of law, society, and technology within Brazil. The immersive fieldwork that fuels this dissertation is therefore driven by the local norms and culture of the Brazilian people whom I came to know in these two locations.

As a means to provide nuance to theories of democracy and the other subcategories I employ herein, this dissertation offers ethnographic insights into the unique ways of Brazil. I approach these themes and subcategories not as concretely defined social science theories, but as topics of ongoing interpretation and negotiation. I have found anthropological scholarship on Brazil to provide extremely useful ways to explore the many layers of that country's society by emphasizing the significance of social abandonment, local perceptions of beauty, transitions from dictatorship to democracy, and the connections between *limpeza* ("cleaning") and security (Biehl 2004; Edmonds 2007; Dent 2009; Dent 2016). Moreover, ethnographies of Brazil also offer sensitivity to Brazil's disadvantaged communities and the complex issues of poverty, violence, and marginalization that these communities experience (Scheper-Hughes 1992; Linger 2003; Goldstein 2004; Yúdice 2003). Combined with these ethnographic studies, I employ the subfield of legal anthropology to provide meaningful ways of exploring the many textures of these tropes through discourses of legal pluralism (Merry 1988; Fuller 1994; Moore 2001), which addresses the interaction between state and non-state law, and legal realism (Nader 2002), which seeks to represent the whole of law in its relation to society, rather than its individual parts.

I read this and other scholarship while preparing for the field. These studies informed my thinking and outlook on Brazil not only as a country but also as a tangible place where people experience the dilemmas that Jeff valiantly tried to express to me in Ipanema that day. Although I was amazed by Jeff's articulation of theories he had never read, I understood that the goal of useful ethnography is to share the experiences of the "other" in a meaningful way, so that those who are not similarly situated might understand such foreign contexts and cultures. Just as Jeff shared his keen insights on Brazilian democracy, this dissertation is my attempt to convey the stories of my interlocutors, specifically as they relate to the MCI, the theoretical categories it evokes, and its promotion of democratic Internet governance.

As I will demonstrate in the chapters that follow, the MCI alone is insufficient to rectify decades of societal inequalities experienced by the multitudes of Brazilian people. My contention throughout this dissertation, however, is that while decades of socioeconomic inequalities have created disparities in citizenship, which hamper Brazil's democracy, laws such as the MCI can still serve as valuable sites that prompt social change. Indeed, even on its own, the MCI remains enough to stimulate discourse regarding the potential for Internet governance to advance democracy.

Dissertation Outline

This dissertation consists of this introduction, three substantive chapters, and a conclusion. The next chapter (Chapter 2) explains the geographic terrain of Rio de Janeiro and how the city is divided along racial and class lines according to this

terrain. I employ the metaphor of the Internet as a mirror to posit that the Internet and ICTs must reflect the conditions of the society that uses such technologies. I describe how the MCI promotes Internet inclusion, while the city of Rio de Janeiro implements policies that foster social exclusion. These same divides can be seen in the online realm where the social networks of the rich and poor fail to overlap. Moreover, these digital and societal divides often exacerbate longstanding socioeconomic inequalities that exist in Rio and in Brazil more broadly.

Chapter 3 examines Internet access in *Complexo da Maré* —a favela in Rio's North Zone. Rio's favelas are territories where many of the intended beneficiaries of Internet access policies live. Yet, drug gangs often control favela neighborhoods and censor the digital access of favela residents, which is just one example of how Internet access in disadvantaged communities is tied to a number of broader sociopolitical realities and risks. Because these risks index larger disjunctions in contemporary Brazilian democracy, this chapter proposes that violence and informal governance in urban favelas create a corresponding disjunction in the MCI's pledge of Internet access as a civil right.

Chapter 4 employs the rhetorical question, "Is Facebook the Internet?" to explore both the regulatory and theoretical aspects of net neutrality in Brazil. From a regulatory perspective, I examine zero rating —mobile phone promotions, often sponsored by Facebook, that provide free mobile data to low-income subscribers and its suspect legal status under the net neutrality provisions of the MCI. Theoretically, I juxtapose the values of net neutrality with the ideals of Brazil's

cultura livre (free culture) —a movement recognized both in Brazil and globally in which computer programmers seek to supply free or open-sourced access to intellectual property and cultural production (Mizukami and Lemos 2010; Lippman 2014). Through this comparison, I argue, we get a sense of the collaborative and networked potential of an Internet modeled in favor of the public good. In addition, this rhetorical question "Is Facebook the Internet?" also provides a glimpse of the longstanding dependency relationships that exist between the West and Latin America. In examining net neutrality in Brazil, this Chapter argues secondly that the globalizing tech practices of companies like Facebook perpetuate these dependency cycles.

Like the disjunctive nature of Brazil's democracy (Caldeira and Holston 1999; Caldeira 2000; Holston 2008), this dissertation ultimately raises concerns about the dilemma of "Internet civil rights" in that country. As legislation, the MCI champions a democratic form of Internet governance through its call for openness, promotion of the inclusive right to Internet access, and protection of net neutrality. Yet the inclusive aims of the MCI are tempered by the violence and socioeconomic exclusion that underscore the disjunctive nature of Brazil's democratic project. With these caveats in mind, I view the MCI as a laudable example of democratic Internet governance. However, the everyday issues of inequality faced by Brazil's poor and working class reveal the limits of democracy, both online and off. If Internet governance is to be characterized for its potential to improve democracy rather than

its limits, the objectives of the MCI must be coupled with both social and cultural changes that expand well beyond the realm of ICTs.

CHAPTER TWO

"O Internet é um Espelho"

It was March 2015 and I was in São Paulo for a conference on the *Marco Civil da Internet* (MCI). I had traveled to São Paulo from Rio with Jason, my friend and fellow ethnographer. Jason, a North American anthropologist, was researching digital inclusion in Rio's *Complexo do Alemão* favela and knew of my interest in Brazil's new Internet bill of rights, the MCI. Jason, who is white, was also living and conducting fieldwork in the predominantly *preto* (black) and *pardo* (mixed race of African descent) *Complexo do Alemão*, "one of Rio's most violent favelas" (Scott 2016: 105). He and I would often talk about the racial and class dynamics of Rio and how these dynamics impacted Internet access and engagement for Brazil's poor. We also discusses the parallels between Internet access and broader issues of access to the City of Rio de Janeiro at large. For instance, we were both intrigued by how accessible things (i.e., both the Internet and the city) were for him —a privileged, middle-class white man from the U.S., working in a community of poor, mostly *preto* and *pardo* Brazilians.

I spent time with Jason and the Brazilian family he lived with in Alemão. Jason lived with Bete, as she liked to be called, at her home in Alemão for just over a year. Bete, who was in her early 60s, worked as an *empregada* (housekeeper) in Rio's South Zone and lived with her two teenage grandchildren in their home in Alemão. Jason met Bete during his preliminary fieldwork; she invited him to live at her home in Alemão when he returned for primary fieldwork in 2015. Bete and her grandchildren treated Jason like family. He was welcome during their family gatherings and they spent holidays together. Moreover, Bete's friends in Alemão knew that Jason was her guest and they treated him accordingly, making sure he was safe while in the favela.

Jason's research examines the intersection between digital inclusion initiatives in favelas like Alemão and the everyday violence that exists in those same communities. He argues that such violence is a regular part of how communities like Alemão experience digital technology (Scott 2016). In examining the intersection of violence and digital technology, Jason mediates socioeconomic, racial, and cultural differences through his positionality at a white, male American researcher working in a marginalized Brazilian favela. Indeed, while Bete's race, class, gender, and status as a *favelada* (resident of a favela) limited her frame of reference solely to her community in Alemão, Jason's positionality enabled him to transition between racial, class, gender, and societal divides in ways that Bete never imagined. I wondered how could this be. Bete welcomed Jason -a foreign researcher- into her home in Alemão, a community where she had lived for decades. Yet, in many ways, Jason had more access —both to the Internet and the city at large—than Bete. What does this dilemma of access say about Brazilian society? And how might laws like the MCI, which aims to promote Internet access, inclusion, and diversity, help mitigate these disparities?

Jason and I took the bus to São Paulo from Rio and had just arrived for the first day of the conference when I heard one of the panelists say in Portuguese, "O Internet é um espelho" (the Internet is a mirror). The power of the Internet as a metaphorical reflection of society at large resonated with me. I thought of Ronaldo Lemos — the Brazilian law professor often credited with spearheading the MCI— and how he argued that lawmakers should not be able to define Internet crimes in Brazil's criminal code without also outlining citizens' corresponding Internet rights (Lemos 2007). If citizens must abide by certain norms in the real world, then there are also norms that must be adhered to in the digital world. Similarly, just as citizens have civil rights in the real world, then they should presumably have corresponding civil rights in the virtual world, or so the reasoning went. The argument is that the digital world is a reflection of the real world and, accordingly, deserves its own set of corresponding rights. This logic presumes that all Brazilians have equal rights as citizens, which is a dubious presumption, as I will discuss later in this chapter. Despite the power of this metaphor, I would not fully grasp its significance to my research until I began writing this dissertation.

The *Seminário Marco Civil da Internet* was a two-day long conference focusing on net neutrality, online privacy, and all things related to the MCI. We arrived about an hour late on the first day of the conference and walked in on the middle of a panel with a moderator and five panelists. I immediately noticed the racial and gender dynamics of the panel and the audience. Although there were several women in attendance, the auditorium of this conference was filled with

roughly 150 attendees, which consisted of mostly older white men. The list of panelists included lawmakers, attorneys, academics, digital activists, and executives from the tech sector. There were other people of color in attendance (mostly Brazilians I imagine), but I was the only black person in audience. I did not take my presence as a black man of African descent at a predominantly white male conference on Internet governance in Brazil for granted. According to Brazil's 2010 census, 50 percent of Brazil's population identify as *preto* or *pardo* (Carless 2015). However, spaces like the conference in São Paulo, where critical issues of digital governance take place, often have very few black or brown faces. If the MCI seeks to democratize the Internet, then surely those responsible for crafting the rules of Internet governance, many of whom were at this conference, should represent the voice of the black and mixed race Brazilians traditionally absent in these spaces. Moreover, if the Internet is a societal mirror, as the panelist suggested, it was indeed ironic that those participating in this Internet governance conference did not equitably reflect Brazilian societal demographics. Who was responsible for representing the voice of the Brazilians that looked like me, I wondered?

The metaphor of the Internet as a mirror of societal access is personally compelling because I have often thought of the Internet as a reflection of both the physical and metaphysical worlds. For instance, social media allows its users to broadcast their thoughts, feelings, and concerns instantly across the globe, creating new modes of connection through time and space. Indeed, there is irony in the fact that, when turned off, the computers, smart TVs, and mobile phones that facilitate this

process reflect an image of the viewer in the black screen of the device. This reflection is the origin of the pop culture phenomenon of digital technology known as a "black mirror." When disconnected, these devices are like mirrors. Users attempt to look into the digital world through these mobile devices, but are left seeing their own reflection in the black mirror of the device's screen.

In this chapter, I employ the metaphor of the Internet as a mirror of societal access to explore the challenges presented when attempting to democratize the Internet in an undemocratic society. The MCI grants the right of Internet access to all Brazilians, apparently assuming that all Brazilians have equal rights of citizenship. However, recent scholarship (Caldeira and Holston 1999; Caldeira 2000; Yúdice 2003; Holston 2008) clearly shows that such a presumption regarding Brazilian citizenship is not entirely accurate. Drawing from such scholarship, this chapter argues that the MCI cannot fulfill its promise of an open and inclusive Internet given the lack of respect for the citizenship rights of Rio's marginalized populations. While the MCI's efforts towards democratic Internet governance and improved Internet access are laudable steps towards a more equitable society, the MCI alone is insufficient to rectify decades of socioeconomic inequalities.

If the Internet is indeed a mirror of the society that the MCI seeks to democratize, we must first ask what preexisting inequalities permeate a city like Rio de Janeiro. How do these inequalities impact its citizens in terms of race, class, and socioeconomic status? How are these inequalities affected by Internet access and engagement? And does the MCI mitigate or exacerbate these existing inequalities?

Diversity

The fourth of the MCI's ten guiding principles¹⁴ is diversity, which reflects the idea that cultural diversity must be respected, preserved, and stimulated (Arnaudo 2017). This principle states, "cultural diversity must be respected and preserved and its expression must be stimulated, without the imposition of beliefs, customs or values (Glaser 2014). Yet, because Brazilian cities have a history of urban segregation (Holston 2008), it was not surprising to see such a lack of diversity in this conference and at other spaces examining Internet law and governance. During fieldwork I conducted at Getúlio Vargas Law School in Rio,¹⁵ for instance, there was also a lack of diversity common among the business, academic, and political elite who frequented the school for conferences and seminars. While this lack of diversity is common among Brazil's elite, it also often manifests itself in informal spaces, like social media.

In certain instances, Brazil's social media has mirrored the segregation and social exclusion that many of the country's poor and working class experience on a daily basis. A prime example of this phenomenon happened during the massive pre-World Cup¹⁶ protests that took place throughout Brazil in 2013. The protests, which

¹⁴ The *Comitê Gestor da Internet* (Brazilian Internet Steering Committee or CGI) established the ten guiding principles of Internet governance in 2009. These ten principles are outlined and discussed in the introduction to this dissertation.

Brazil's top law school, Fundação Getúlio Vargas Law School (FGV Law) has campuses in Rio de Janeiro and São Paulo. The Center for Technology and Society at FGV Law Rio was a key site in developing the MCI. One of the MCI's founding fathers, Ronaldo Lemos, was a professor at FGV Law Rio prior to the law's enactment. I conducted four months of fieldwork at the FGV Law Rio in 2015. ¹⁶ Brazil hosted the 2014 World Cup in twelve cities throughout the country.

were the largest political mobilization in Brazil since the end of its military dictatorship in 1984, began in June in the city of São Paulo, sparked by an 8% increase in public transportation fares (Saad-Filho 2013). Although these fare increases triggered the uprising, the protests grew to encompass a much broader range of public issues, including health care, education, and government corruption. The protests originated with college students and young activists who were outraged by government spending for the 2014 World Cup and 2016 Rio Olympics, especially given the perceived lack of public services in Brazil. These demonstrations were mobilized via the Internet and were highly influenced by social media networks (Trigo 2013). For instance, Brazil's acclaimed independent digital activist network, *Narrativa Independente, Jornalismo e Ação (Midia Ninja* or simply, NINJA) rose to prominence by live-streaming these protests to millions on Facebook and Twitter (Amorim 2014).

Nemer and Hakken (2017) examine the stratified nature of these protests in Vitória, Brazil, a coastal city about three hours north of Rio. The initial protests in Vitória on June 17, 2013, and drew approximately 20,000 people. David Nemer —an ethnographer from Vitória who works as a professor at the University of Kentucky participated in the demonstrations on that day and was unable to locate any residents from the Vitória's favelas among the crowds. According to Nemer, the "protesters were mostly white, and wore clothes that resembled typical upper class citizens" (Nemer and Hakken 2017: 290). Nemer discovered that residents of Vitória's favelas were not part of the same Facebook networks as their middle-class counterparts living

outside of Vitória's favelas and, thus, knew nothing about a major protest occurring in their own city. Residents from Vitória's favelas only learned of the protest because it garnered substantial attention from mainstream Brazilian media. It was only then, after this mainstream attention, that they participated in future protests by organizing their own Facebook groups (Nemer and Hakken 2017).

There are two important takeaways from Nemer's and Hakken's study. First, favela residents were able to use social media to organize and participate in major national demonstrations, which affected their rights as citizens. Second, and perhaps more significantly, geographic and social divisions that map along the lines of race, class, and income are also present on the Internet as the social media networks of those living in favelas did not overlap with their more prosperous neighbors living outside of those communities (Nemer and Hakken 2017).

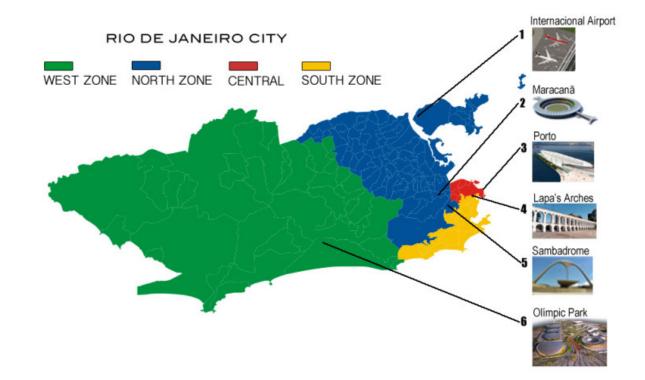
Shortly after these 2013 protests, I arrived in Rio for a month of preliminary fieldwork. It was at this time that I met Jason, the North American ethnographer I introduced earlier. As a foreign researcher living in a favela, Jason's social media networks ran the gamut from favela residents in the North Zone to *gringos* in the South Zone. I was curious, however, to see whether Bete —Jason's hostess in *Complexo do Alemão*— had a social media network that spanned outside of the favela. Because Bete worked as an *empregada* in the South Zone, she regularly interacted with a family that was quite unlike her own in terms of race and financial resources. Did she keep in touch with them when she was at her home in the favela? Did they stay in contact on Facebook (the only social media platform Bete used)?

According to Bete, she was Facebook "friends" with the family that employed her. However, she claimed that she seldom saw any of their posts. "I only use Facebook to keep in touch with my family and happenings in the favela," she claimed. "And Alemão is such a large favela, we have everything we need here. If I didn't work in the South Zone, I would only go there to visit the beach," she said. Although Bete was Facebook "friends" with her employers and traveled freely in and out of the favela, her social networking focused solely on her community in the favela, rather than people or places on the outside. By contrast, because of his status as a white, North American researcher, Jason's positionality provided him with the unique ability to move in and out of different social contexts in ways that Bete could not. Moreover, access to social media connected Jason to the city at large. Despite such access, Bete was more comfortable in her community in Complexo do Alemão and chose to remain local. While Bete's decision to focus her attention on the Complexo may be a personal choice, her decision to remain local still speaks to Rio's complex racial and social divides, which are reinforced by its larger geographical divisions.

Because inequality and ideas of citizenship in Rio de Janeiro are reflected through the city's geographical boundaries (Ventura 1994; Jaguaribe 2007; Holston 2008; Moehn 2012; Larkins 2015;), it is important to consider the terrain of Rio and how this terrain relates to the inequity that exists in this "divided city" (Ventura 1994).

Geography

To truly understand the social, cultural, and political dynamics that feed the extreme exclusion and marginalization experienced by many of Rio de Janeiro's poor and working-class citizens, one must understand of the city's geographic terrain. As shown on the map below, Rio is divided into four zones or quadrants: *Zona Norte* (North Zone), *Zona Sul* (South Zone), *Zona Oeste* (West Zone), and *Centro* (Downtown).



Recent scholarship has shown that many of Rio de Janeiro's digital technologies are concentrated in wealthy areas of the city (the Central and South Zones) at the expense

of poorer peripheral regions (the West and North zones), a pattern that exacerbates Rio's longstanding socioeconomic and racial divides (Gaffney and Robertson 2016).

Despite this disparity, digital technology remains an important conduit for disadvantaged youth to engage in certain cultural traditions. For instance, scholarship has also suggested that digital technology fuels Brazilian cultural traditions like samba, baile funk, and capoeira, which offer disadvantaged youth¹⁷ a therapeutic means to cope with the everyday racism and social exclusion they experience (Yúdice 2003). However, little work has thoroughly examined the interplay of tech policy at the institutional level and digital access in marginalized communities. To understand this interplay, it is important to first have an understanding the racial and class dynamics that fuel the divisions within the city.

South Zone

The South Zone is the wealthiest and most resource abundant area of Rio de Janeiro (Moehn 2012). Rio's South Zone is home to its world-famous beaches: Copacabana, Ipanema and Leblon. Fueled by the fame and beauty of these beachside communities, each year the city hosts millions of tourists from across the globe. Along with the year-round tropical weather, most visitors come exclusively for a taste of the life and culture of these communities. For instance, during my first visit to Rio in the summer of 2012, I stayed in a hostel across the street from *A Garota de Ipanema* (The Girl from Ipanema), which is more famously known as the restaurant where Tom Jobim

¹⁷ The disadvantaged youth I'm referring to here reside primarily in the North and West Zones (the green and blue areas on the map).

and Vinícius de Moraes wrote the acclaimed bossa nova song of the same name. During that preliminary field visit, I met numerous travelers and tourists who visited Ipanema specifically to have a beer at this restaurant where the song was penned, which sits just a short block away from the beach.

Like most of the apartment buildings in these beachside communities, a large, stylish security gate stands between the hostel and the street. When entering and exiting the hostel, one has to be buzzed in and out by the front desk attendant. As Teresa Caldeira (2000) notes in *City of Walls*, these "walls" or security gates are the norm in many of Brazil's wealthier communities. For Caldeira, the walls represent the "aesthetics of security," (2000: 291) for Brazil's wealthy and are used for the practical reasons of security and segregation. Additionally, Caldeira suggests that the security gates are also status symbols that demonstrate the status and prestige of their residents. For many of those affluent South Zone residents, then, sophistication and security go hand in hand (Caldeira 2000).

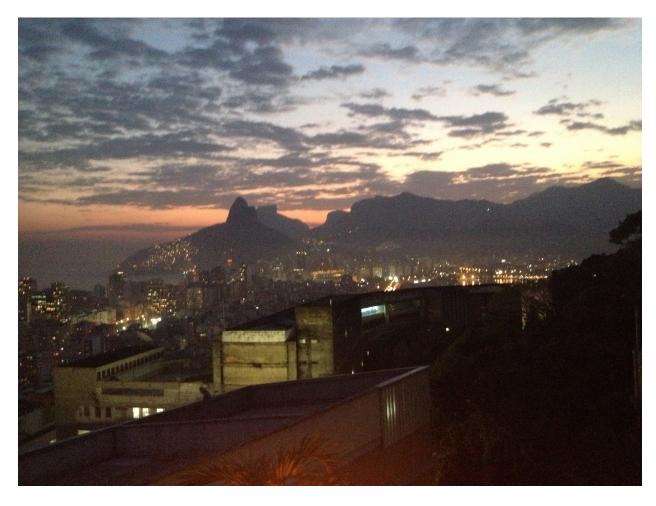
In sharp contrast to the elaborate security walls, tourism, and visceral beauty of its ocean-side beaches, the South Zone is also home to numerous favelas, many of which lie adjacent to these tourist-friendly beaches. Indeed, as Beatriz Jaguaribe argues, Rio is "a tumultuous urban maze of inequality and social juxtaposition. Between the favelas and the neighborhoods of the rich and middle class are numerous exchanges, and indeed it is the ambiguity of these contact zones that allows both violence and cultural socialization to simultaneously occur" (2007: 118). In many ways, however, the favelas are polar opposites of the walled communities that line the

beachfront areas. I received a clear example of this polarity when I went to visit Rita's community in *Cantagalo*, a favela in Ipanema that is located just a short walk from the beach. Rita was a 30-year-old, psychology PhD student and a life-long resident of *Cantagalo*. As a researcher and scholar herself, Rita understood my work and she was enthusiastic about showing me a microcosm of Rio's inequality through the "walls" of Ipanema.

I went to meet Rita at the base of Cantagalo on a hot summer day. Unlike the security gates that prohibit entrance to the fancy homes just a few blocks away, one could easily walk into and out of the favela. *Cantagalo* sits on a hill just above Ipanema's metro station. From the entrance near this metro station, a staircase leads up to the favela. At the top of the staircase there is a paved, narrow pathway that forms a route through the hills of favela. Climbing the concrete pathway in the summer humidity was challenging and Rita and I were both breathing heavily. In contrast to the walled neighborhoods nearby, as we walked, I noticed several opened doors, which provided clear views into the residents' homes. "It's rude to stare," Rita said while rolling her eyes at me as we continued up the hill. It may have been rude to stare, but it was also prudent to keep ones eyes on the pathways because, on at least two occasions, we came across feces on the walkway. "Dog poop?" I asked Rita? "Most likely," she said unconvincingly. We were on our way to a new bar inside *Cantagalo*. In recent years, favela tourism was on the rise (Larkins 2015), and several bars and hostels had opened inside various favelas throughout the South Zone. Rita wanted to show me the bar's vistas, which were one of its prime tourist attractions.

We arrived to a spectacular evening sunset at Bar do Gilda. The bar, which was located towards the top of this hillside favela, has a beautiful 270-degree view overlooking Copacabana Beach to the north, and to the west, *Pedra da Gavea*, a monolithic mountain in the Tijuca Forest National Park. The bar's vista features unobstructed views of the beachside communities of Ipaneman and Leblon, the favela Vidigal, the iconic mountainous rock formation Dois Irmãos, and the Atlantic Ocean. After arriving at Bar do Gilda with its stunning views, one could easily understand the drive behind what Erika Robb Larkins (2015) calls "Favela, Inc." According to Larkins, Favela, Inc. is the newly branded version of a violent Rio that circulates in the mainstream media. In this commodified depiction of Rio, the media represents favelas as sensational places of recreation and, thus, ideal places for capitalist consumption. In most instances, those who live outside of favelas and operate businesses (e.g., tours, bars, hostels, etc.) inside favelas allow very little, if any, of the profits generated to go towards improvements for the favelas or its residents (Larkins 2015). Rita's feelings about Bar do Gilda reinforced this theory. Although Rita accompanied me to the bar, she refused to purchase anything while we were there. Rita told me that while she goes to the bar to enjoy the views, she feels that establishments like Bar da Gilda are not good for favelas. As Rita told me:

During the last few years, many bars, restaurants, hostels and other businesses have opened in favelas here in the South Zone. But people from the favela don't own most of these new businesses. Gringos from the United States or Europe generally own them. Like this place, for example, the owner is British. They come here because the currency in their country is much stronger than the $real^{18}$ and they can buy property in the favela very cheap. Then, they charge prices (Rita pointed to the menu I was holding) that only people from the outside can afford.



Despite the presence of businesses such as Bar do Gilda in her community, Rita told me that she felt at home in Cantagalo. In this regard she was like Bete, who felt more at home in the confines of her favela, Complexo do Alemão, than in other parts of the city. Rita did not always feel at home in the surrounding community of

 $^{^{18}}$ Brazilian currency is known as the "real." At the time of my conversation with Rita, \$1 was equal to R\$3.25.

Ipanema, however. On one sunny summer afternoon, for instance, I went to meet Rita for coffee in Ipanema, just a few short blocks away from her home in Cantagalo. I suggested we meet at Felice Café, a trendy spot near the beach that catered mostly to tourists and upscale Brazilians. Because this was one of the few cafes that had free Wi-Fi in Ipanema at that time, I would often go there to write and use the Internet. Although Cantagalo was just a few blocks away, I seldom saw any dark-skinned Brazilians in this swanky beachside café. I was sitting at a table on the outside patio when Rita arrived. She had on a bright, multicolored sundress and wore her hair in a large, militant Afro that was reminiscent of Angela Davis in the civil rights era. With a disgruntled look on her face, Rita looked around at the other patrons sitting on the patio and asked, "Why did you want to come to this café?" "I come here because it's close to the beach, they have free Wi-Fi, and because it reminds me of a café I used to visit in California," I said. "Surely, restaurants in California are more diverse that this. We're the only black people here!" Rita stated. With the exception of a few servers, Rita and I were indeed the only black people in the café. "It's only a few blocks from your home. I thought you might like it here," I said. "I only like to go places where I feel welcome," Rita replied. "Look around," she demanded. "What would make me feel welcome here?"

According to Rita, many of the businesses near the beaches in the communities of Ipanema, Leblon, and Copacabana do not welcome residents from the favelas located in those same communities. Rita claimed that she and her favela neighbors seldom frequent beachside establishments like Felice Café because they

know these businesses primarily cater to tourists or those of a wealthier demographic. "How do they know that you're from the favela?" I asked. "It's obvious," she claimed. "You're black but you dress and speak a certain way, so people know that you're not from here," she told me. "When you're from the favela, people know that you're from the favela," she insisted. While I chose to work in Felice Café because of its free Wi-Fi, Rita and her neighbors from the favela felt like outcasts in these establishments, which often limited their opportunities for Internet access.¹⁹ Thus, while these South Zone communities were "walled" with fancy security gates to keep certain segments of the population out of their hostels, apartments, and businesses, there were also less tangible walls that made visceral barriers in these communities. While invisible, these walls existed along the lines of race and class, separating those that lived in favelas from their more affluent neighbors who live outside of these communities.

In addition to residents of the South Zone favelas, many of Rio's poor and working class commute (sometimes for hours) from the city's North and West Zones to their South Zone jobs (Edmonds 2007; Holston 2008). At my stay in the Ipanema hostel during a 2012 site visit, for example, I met Raquel, a *Carioca*—as people or things from Rio are called—who lived in Santa Cruz and worked at the hostel. Santa Cruz is in Rio's West Zone and lies approximately 75 kilometers west of Ipanema. As a hostel employee, Raquel had a room and free Wi-Fi in the hostel and stayed there

¹⁹ Many favela residents, who access the Internet primarily through their smartphones, cannot afford subscription mobile phone service and often rely on free Wi-Fi connections to access the Web (Nemer and Hakken 2016).

during her workweek. On her off days, she endured a two-hour commute via public transportation to her home in Santa Cruz where she spent time with her family. Because she had such a long commute, staying at the hostel during the workweek was important to Raquel. And the fact that the hostel had free Wi-Fi was equally important. Raquel could not afford subscription mobile service and relied on a prepaid mobile plan with limited data, which often restricted her Internet access. "Since I work so far away from my home, having a mobile phone with Internet is really important to me because I mostly keep in touch with my friends and family through Facebook and Whatsapp," she told me.

While Raquel was fortunate that she had a job that supported her lifestyle by providing free Wi-Fi, many of Rio's poor and working class who endure similar commutes are not afforded the same luxury. In addition to the challenge of Internet access, the combination of the poor and working class from local favelas and the periphery interspersed among the extreme wealth of the beachside South Zone communities makes for an unusual mix, as I will discuss in the following sections.

Centro

While the South Zone is known for its wealth and tourism, Centro is unique in that it houses many of Rio's working-class residents, along with its business and political district. Centro is also a central home of the city's homeless population, sex workers, notorious *termas* (gentlemen's clubs), and Lapa—the downtown bar/nightclub district. While the city's business and political elite frequent Centro by day, at night

Centro transforms into the nightlife capital for Rio's homeless, tourists, street vendors, partygoers, and *malandros* (streetwise scoundrels or crooks). Although neighborhoods like Lapa are bustling with nightlife, however, other areas of Centro remain grim and dark at night, which fosters fears of theft, robbery, or muggings. I was often warned not to walk in certain areas by myself after dark. Friends like Rita would tell me that, if I dressed a certain way, my dark skin might work in my favor as long as I kept my mouth shut. Although I spoke conversational Portuguese, my accent denoted my *gringo* origins, and *gringo* origins could make me vulnerable if caught on the wrong side of Centro after dark.

During my primary fieldwork in 2015, I lived in a neighborhood called Glória, which sits on the border between the South Zone and Centro. My apartment was just off of Rua da Glória, the main thoroughfare that leads directly into Lapa. Each evening around sunset, sex workers and *travestis*²⁰ (cross-dressing sex workers) would set up shop in their respective locations, always on the two blocks between Glória and Lapa on the east side of the street. When I first moved to Glória, I was unaware of this nightly routine and, when I began walking to Lapa regularly to meet friends and colleagues, was unsure if it was safe to take this route. It was around this

²⁰ More than just merely male cross-dressers, *travestis* assume female names, clothing, hairstyles, cosmetic practices, and pronouns. In order to develop feminine bodily features like breasts, wide hips, and shapely buttocks, many *travesties* also take large quantities of female hormones and inject silicone into their bodies. They do not, however, remove their penis or identify as women. They are one of Brazil's most feared, stigmatized, and marginalized groups and are often confronted with police brutality and abuse from their clients. For these reasons, many carry weapons (e.g., small guns, knives, razor blades, etc.) to protect themselves; in some instances, the weapons are used to rob their clients (Kulick 1998).

time that I met Jonathan, a 26-year-old black musician from Rio who lived close to Centro. Jonathan told me that, for as long as he could remember, the *travestis* had been a nightly staple on Rua da Glória. As for evening walks to Lapa, Jonathan told me not to worry, explaining, "as long as you don't bother them, *travestis* won't bother you."

In addition to introducing me to the nightly street dynamics in between Glória and Centro, Jonathan was also instrumental in acquainting me with the demographic distinctions that underscore the major racial and class differences between the different zones of the city. Jonathan grew up in a North Zone neighborhood known as Rio Comprido, an area just north of Centro. Jonathan told me that he had always had an affinity for music. His father played *cavaquinho*—a small stringed instrument that resembles a miniature guitar—in local samba bands when he was young. Taking after his father, Jonathan learned to play several instruments, the keyboard being his specialty. While most of Jonathan's friends from Rio Comprido preferred rap or *baile funk*—a type of dance music popular in Rio's favelas—jazz was Jonathan's genre of choice. As his skill as a musician grew, he began traveling to gigs in different parts of the city and thus learned his way around Rio. Being a jazz musician meant that Jonathan usually played with a diverse array of musicians, many of whom lived in wealthier areas of the city.

According to Jonathan, it was good that I lived in Glória because it was on the outskirts of the South Zone and was a healthy distance from the swanky South Zone beach communities of Copacabana, Ipanema, and Leblon. Jonathan told me that most

estrangeiros (foreigners) generally don't frequent neighborhoods like Glória and, as long as I spent substantial time in the North and West Zones, living near Centro would be good for my research. When I asked Jonathan why he felt this way, he said simply "South Zone isn't the real Rio." I pressed him to explain his theory further. "You're a black man from the United States, researching in Rio de Janeiro. Spending time in South Zone is nice, but if you want to learn about social and digital inequality in this city, you have to go to the periphery. South Zone is mostly white and wealthy. The further you go into the periphery, the fewer whites you see." Jonathan was communicating the controlling narrative that charts the racial geography of Rio. According to this narrative, whites live primarily in the beachside communities of the South Zone. Meanwhile, pretos (blacks) and pardos (mixed race of African descent) live mostly in the poorer North and West Zones. This narrative is indeed supported by statistics. Estimates from Brazil's 2010 census show that while the city of Rio de Janeiro is 50% black or mixed race, an astounding 80% of South Zone residents identify as white (Carless 2015). Indeed, for Afro-Brazilian Cariocas like Jonathan, the South Zone is not the real Rio.

"The Real Rio" (North and West Zones)

Like the underground cables that transport data packages through cyberspace, certain areas of Rio de Janeiro have underground tunnels that transport residents between the South Zone and "the real Rio." One of these tunnels, known as *Túnel Rebouças*, occupies a 1.7-mile stretch between the South Zone's *Lagoa* neighborhood and Rio

Comprido (where Jonathan is from) in the North Zone. Traveling through this tunnel from Logoa into the North Zone is almost like being transported to a different world (Moehn 2012). Outside of the beaches, Lagoa is one of the South Zone's the most popular destinations for leisure and tourism. The neighborhood itself is an affluent residential area located around Rio's Rodrigo de Freitas Lagoon that sits adjacent to the well-to-do South Zone communities of Ipanema, Leblon, Copacabana, Gávea, Jardim Botanico, and Humaitá. The lagoon is connected to the Atlantic Ocean via canal and is surrounded by a five-mile bike path that attracts both locals and tourists. Walking this bike path is like strolling through a garden with the gorgeous scenery of the lagoon on one side and luscious flowers, trees, and tropical cacti on the other. Vendors are dispersed throughout the lagoon area offering everything from thirstquenching agua de cocó (coconut water) to intoxicating caipirinhas (Brazil's national cocktail). Ground-level views provide stunning images of the adjacent communities along with the mountainous vistas of Dois Irmaoes and Pedra da Gavea in the background to the south and the virtuous image of the Cristo Redentor (Christ the Redeemer) statute that sits atop the Corcovado Mountain to the north. Indeed, Lagoa provides an idyllic image of Rio de Janeiro that is fit for post cards.

Leaving *Lagoa* to enter the underground *Túnel Rebouças*, however, is the beginning of a journey to a different Rio. The tunnel —a cement incursion underneath Corcovado Mountain in the *Tijuca* Forest National Park— is a murky, automobiles-only freeway that connects *Lagoa*'s tourist-friendly neighborhoods to the North Zone or, as Jonathan would say, "the real Rio." On my first trip through *Túnel Recouças*,

its darkness and depth left me feeling claustrophobic. I had often heard about *arrastões*²¹ (literally a fishnet or dragnet) occurring on Rio's highways. With the sheer distance of *Tunel Rebouças*, the thought of such an incident was unnerving.

Exiting the tunnel, it is clear that one has arrived in a different part of the city. Unlike the eye-pleasing images of *Lagoa*, arriving in the North Zone one is met with views of the favelas that litter the hillsides. The crudeness of these dwellings belies the fact that many of these structures are made of brick and concrete. Unlike the more pristine buildings in South Zone, the walls and structures in the North Zone are littered with *pichação*²² (graffiti), which often appears in very high, seemingly inaccessible places. Motoboys —young *pardo* or *preto* men generally from favelas who transport things or people via scooters— are a frequent sight on the roads sporting the uniform of most favela youth: *bermudas* (knee-length shorts), tank tops, and havaianas (flip-flop sandals). For various reasons, black and brown youth donning this same attire have been stigmatized throughout Rio, as I will discuss shortly.

When contemplating Rio's terrain, it is important to understand that the city of Rio de Janeiro lies within the larger Brazilian state of Rio de Janeiro. While consisting mostly of *pretos* and *pardos* (Carless 2015), the North and West Zones of

²¹ An arrastão is a crime that occurs when a group of criminals occupies a location with the intent of robbing a large number of people therein. In Brazil, these incidents generally happen on highways and beaches and in tunnels and shopping malls.
²² While *pichação* is generally thought of as graffiti, there is a distinction between the two terms. *Pichação*, which often includes rude or sexual themes, is a crime. However, *grafite* (graffiti) is considered an art form and is legal when given the property owner's consent.

Rio sit within its city boundaries. As I would come to learn during the course of my fieldwork, an understanding of what is meant by the "periphery" is essential to grasp Rio's broader geographic landscape. In addition to the city's North and West Zones, when Jonathan referred to the periphery, he was also referring to suburban areas to the north, like Nova Iguaçu and Duque de Caxias, which are within the state of Rio, but rest outside the city's borders. However, I noticed that Raquel, who worked at the hostel in Ipanema, would refer to her home in Santa Cruz as the "periphery." Because her home in Santa Cruz was 75 kilometers from her job in Ipanema, it may indeed feel like a suburb. However, Santa Cruz lies within Rio's city borders. The common denominator in the definition of "periphery," then, is that it lies outside the borders of Centro and South Zone. Moreover, the periphery is generally considered the home of Rio's urban poor.

The story of Rio's periphery, which is similar to the story of urban peripheries in many cities across Brazil, explains Rio's stunning spatial contrasts. According to James Holston (2008), the story of these peripheries, where most Brazilians live, is one of *autoconstrução* (autocontstruction) —a process in which residents build their own homes, neighborhoods, and urban life. Due to urban migration from Brazil's northeastern regions during the mid-1900s, many of Brazil's low-income urban residents were forced to the periphery. There, they literally built their own homes and way of life. Rather than through state or bank financing, autoconstruction occurred through private, informal means and created the urban segregation that persists in

Brazil's major cities today. Indeed, this phenomenon exacerbates the center-periphery divide in Brazil. As James Holston notes:

The center is overwhelmingly wealthy, equipped with every urban service and infrastructure, legally developed, and socially white; its residents experience much lower crime, better health, greater educational and cultural opportunities, and get around in cars and taxis. In contrast, as one moves farther into the peripheries, neighborhoods become poorer, more precarious in every infrastructural service, illegally developed, and socially less white; their residents [are] younger; experience high crime, poor health, low education, and few [have] cultural resources; and spend hours each day packed like cattle on buses commuting to work (2008: 185-186).

The story of *autoconstrução* provides a necessary backdrop for understanding Rio's history of urban segregation. If the MCI seeks to mitigate such segregation by furthering openness and inclusion, how are the challenges of inequality and marginalization, which are key problems facing Rio's disadvantaged residents, reconciled within the MCI? An understanding of citizenship in Brazil helps us address these concerns.

Citizenship

The third guiding principle of the MCI is universality. This principle states "Internet access must be universal so that it becomes a tool for human and social development, thereby contributing to the formation of an inclusive and nondiscriminatory society, for the benefit of all" (Glaser 2014). The MCI codifies this principle by promoting the universal "right of Internet access to all"²³ Brazilians. Through this decree, the MCI's legislators seemingly presumed that all Brazilians have equal rights as citizens.

²³ Article 4 of the MCI grants the right of Internet access to all Brazilians citizens.

Because all citizens of a particular nation are generally considered equal under the law (Rosaldo 1997), the legislators' presumption was fair. This presumption is premised upon the fact that civil rights in the real world should grant corresponding civil rights in the digital world (Lemos 2007). As it relates to citizenship, according to Renato Rosaldo, "one needs to distinguish the formal level of theoretical universality from the substantive level of exclusionary and marginalizing practices" (1997: 27). Such is the case in Brazil where scholars have questioned whether the country's poor *preto* and *pardo* residents have any citizenship rights at all (Caldeira and Holston 1999; Caldeira 2000; Yúdice 2003; Holston 2008).

The point of departure for discussions on Brazilian citizenship is James Holston's (2008) notion of the inequitable ways in which citizenship is allocated in that country. Holston suggests that Brazil's autoconstructed peripheries produce a conflict between those citizens who are "entrenched" in the Brazilian democracy and those that are "insurgent" to it. Produced by the country's historical inequalities, violent crime in its major cities, and autoconstruction, civil citizenship in Brazil is thus "universally inclusive in membership and massively inegalitarian in distribution" (Holston 2008: 7). While those entrenched citizens are respected with full rights of citizenship, Brazil's insurgent citizens —those who experience inequality based on race, education, gender, class, and property— do not. Indeed, as Holston argues with Caldeira (1999), citizenship in non-Western democracies "is never cumulative, linear, or evenly distributed for all citizens" (692). Rather, these scholars contend that in such democracies citizenship is progressive and regressive, uneven and imbalanced.

Because of the irregular nature of citizenship rights for these disadvantaged populations, Caldeira and Holston term such democracies "disjunctive" (Caldeira and Holston 1999; Caldeira 2000; Holston 2008). I discuss the concept of disjunctive democracy in depth in Chapter 3, but the focus of this chapter's analysis is citizenship and its civil components.

Caldeira and Holston (1999) distinguish the civil component of citizenship from its political, cultural, and socioeconomic counterparts by defining civil citizenship as "the sphere of rights, practices, and values that concerns liberty... and justice as the means to all other rights" (693). As it relates to the principles of liberty and justice, civil citizenship is concerned with the relationship between civil society and the state. Civil society must defend itself from abuses of the state and, at the same time, the state must regulate inequality within civil society. There is thus reciprocity in the civil society/state relationship that represents the system of checks and balances that democratic societies are generally built upon. Yet, it remains incumbent upon the state, and state institutions, to use its authority to regulate and impose sanctions that will advance the principles of liberty and justice. For her part, Caldeira (2000) argues that there has been an increase in violence -both civilian and state-sanctionedsince the end of Brazil's military dictatorship. This increase in violence "erodes citizens' rights, segregates social groups and destabilizes the rule of law" (2000: 52). Since the end of its military dictatorship, Caldeira argues, the Brazilian state has inexplicably expanded political citizenship —the right to participate in elections,

organize political parties, and have functional legislative bodies— while delegitimizing civil citizenship and its corresponding principles of liberty and justice.

Meanwhile, in the midst of this discourse, George Yúdice (2003) focuses on citizenship in the city of Rio de Janeiro and posits that Rio's history of violence strokes a fear among the chic middle-class residents of the South Zone. This fear of violence, Yúdice insists, calls attention to the black and brown favela underclass and away from the responsibility of political leaders. Yúdice draws from Renato Rosaldo's (1997) analysis of the critical ways that culture and citizenship intersect. According to Rosaldo, it is important to understand just how citizenship is informed by culture and how "claims to citizenship are reinforced or subverted by cultural assumptions and practices" (1997: 35). Rosaldo argues that "Cultural citizenship operates in an uneven field of structural inequalities where the dominant claims of universal citizenship assume a propertied white male subject and usually blind themselves to their exclusions and marginalizations of people who differ in gender, race, sexuality, and age" (1997: 37). Based on this analysis, Yúdice suggests that, while lacking the rights of civil citizenship, Rio's disadvantaged youth rely on bonds of culture. Such cultural bonds (i.e., cultural citizenship) tie these youth to one another and to certain Brazilian cultural traditions. However, as noted by Rosaldo (1997), claims of cultural citizenship are not universally accepted and therefore not justiciable. While cultural citizenship may be necessary to combat the everyday racism and social exclusion these youth experience (Yúdice 2003), formal civil citizenship remains necessary to secure civil rights in a democratic society. Given the

lack of respect granted to their rights as citizens, it seems unlikely that Rio's disadvantaged populations can rely on state institutions to respect any rights granted through laws such as the MCI.

Apartheid Carioca

During my time in Rio, I grew accustomed to visiting Ipanema Beach on Sunday afternoons. Every Sunday I worked with a vendor at the Ipanema Hippie Fair—a popular street market in South Zone,—which takes place just a few short blocks from Ipanema Beach in Praça General Osório (General Osório Square). After the Fair each week, I would go to the beach, which is just a short walk from the square where the Fair is held. One Sunday afternoon, I left the Fair and headed to the beach as I normally do. I arrived at *Posto 9*, which lies on the western end of Ipanema near the adjacent community of Leblon and began my usual walk towards Arpoador, the small, northeastern peninsula area that sits between Ipanema and Copacabana. As I proceeded along the sidewalk, adjacent to the overcrowded beach, I contemplated walking through the sand to put my feet in the cool ocean. However, since I did not want to fight my way through the swarm of people on the beach, I decided against it. By the time I reached Posto 8, just before the Arpoador, I could sense that something was different. A hostile energy loomed amidst the large crowd converged upon the beachfront.

Since I visited this beach at the same time every week, I had grown accustomed to the casual oceanfront vibes, even when the beach is crowed. This week

the demeanor of the vast multitude of people congregated on both the beach and the adjacent Avenida Vieira Souto suggested that something had run amok. At the time I was not certain what to make of uneasiness I felt. Suddenly, in the distance further down the beach, I could see a commotion surrounding what appeared to be a group of black youth. Since I was by myself that Sunday afternoon, I decided that I would simply go back to my apartment in Glória and return to the beach another day, when the atmosphere was more pleasant. As I began walking to the nearest train station at General Osorio, adjacent to the Hippie Fair, I was immersed in a massive crowd that was also headed towards the train station. Weekends at the beaches often drew droves of people and, since the weather was hot and humid, the size of the crowd converging on the metro station was not unusual. However, both Rita and Jonathan had warned me to be careful when in large crowds in Rio. Malandros (street criminals) were more likely to try something mischievous in large crowds because they were less likely to get caught. Jonathan told me that in such crowds I should always stay alert and keep an eye out for an escape route.

The train I boarded for Centro was jam-packed with mostly black and brown youth, apparently headed back to their homes in the North Zone. Many of these youth donned the standard attire of young favela dwellers: bermuda shorts, tank tops, and havaianas. I had ridden plenty of crowed Metro trains in Brazil, but, like on the beach, the energy of the crowd on this train was raucous. Someone in my train car had a hand-held radio, which noisily played *baile funk*. While the animated youth loudly talked over the music (and sometimes each other), teenage boys flirted with

the young girls who caught their attention and others chanted the lyrics from the music that played on the radio. I was merely headed to my apartment in Glória, just a few stops from Centro, but with all the commotion it felt like I was going to a *futebol* (soccer) game at a sold-out Maracanã Stadium.²⁴ Despite the uproar on the train, I did not observe anyone being disrespectful. It just appeared to be mostly children and teenagers headed home from a day at the beach releasing youthful energy, like kids and teenagers do.

When reading the newspaper the next day, I realized that the disorderly scenes I witnessed both on the beach and the metro offered just a hint of the chaos that had unfolded that Sunday in the beachside communities of Arpoador, Copacabana, and Ipanema. The madness on the beach was the result of an *arrastão* (literally "fishnet"), or mass robbery that historically occurs on Rio's trains, busses, or beaches, generally in summer months. On weekends when the weather is hot, the beaches in the South Zone draw hordes of mostly black and brown teenagers from the North Zone who travel to these beaches to play and cool off in the ocean. Some of the more unscrupulous teenagers, generally a small minority of those who venture to the beaches on such days, engage in the *arrastões*. These mass robberies have a history that dates back to the early 1990s, when violent crime in Rio was at its apex (Yúdice 2003; Moehn 2012; Larkins 2015). In scenes pitting mostly white, middle- and upperclass South Zone residents against dark-skinned favela youth from the North and West Zones, certain South Zone residents reacted by using Facebook and Whatsapp

²⁴ Maracanã Stadium is a major football stadium in the North Zone of Rio de Janeiro.

to mobilize *justiceiros* —a common strategy in which groups of private citizen vigilantes attempt to take the law into their own hands and quell a perceived injustice. Many South Zone residents believe that the police, who often harbor their own vigilante groups (Yúdice 2003), fail to prevent the *arrastōes* and applaud the *justiceiros* for protecting their communities (O Globo 2015). Indeed, the police have been known to conspire with the *justiceiros* to harass and even murder these favela youth, which serves as a warning to others (Yúdice 2003). In the past, the City of Rio de Janeiro responded with intensive policing measures that initially included patrolling North Zone buses destined for the South Zone (Clarke 2013). Those passengers fitting the description of perceived troublemakers —black and brown youth donning the standard favela attire— on these buses were stopped and asked to show identification. The City then took the unprecedented step of eliminating several bus routes from the North Zone to South Zone in hopes of making it more difficult for North Zone residents to visit public beaches in the South Zone (Hearst 2015).

In addition to being stigmatized in Brazil's mainstream media, the collective impact of these local initiatives left many with the feeling that underprivileged youth in Rio were under a new, more spirited attack in the lead-up to the 2016 Olympics. I asked Jonathan, my interlocutor from the North Zone, his thoughts on the tension regarding the *arrrastōes*. Although he was from the North Zone, Jonathan knew the city well and, because he was a professional musician, often collaborated with other musicians in the South Zone. Jonathan told me, "This is why they call it the divided city. Cutting the bus routes is an attempt to cut the ties between the North and South Zones, which proves the existence of apartheid carioca. Because the police can't control the mass robberies, they always place blame on the black youth from the periphery. They think there are only criminals in the North and West Zones, but the *justiceiros* are breaking the law too." Jonathan's claims reflect the deep-rooted inequalities experienced by many residents of the North and West Zones. In Rio de Janeiro, these inequalities function along the lines of race, class, and geography and necessarily determine the respect granted to rights of citizenship.

The week following the incidents on the beach, I visited the *Naves do Conhecimento* (Knowledge Squares or Naves)²⁵ in the *Madureira* and *Triagem* neighborhoods of Rio's North Zone. These two centers, which provide computers for free public access to the Internet and digital skills training classes, along with each of the other five *Naves*, are all located in the North and West Zones. The City of Rio de Janeiro partnered with Cisco, Intel, and the Sequioa Foundation to establish the Naves (Cruz 2013). What was most obvious about the communities targeted for Naves is that they are subject to both the City's digital inclusion and social exclusion policies. For instance, these centers represent an allocation of financial resources to help bridge digital inequalities by introducing local residents into the digital world and helping transform the surrounding neighborhoods into smart communities —those that use digital technologies to mitigate urban inequalities, control emergency services, and enhance public safety and transportation (Allwinkle and Cruickshank

²⁵ A more vigorous ethnographic account of the Naves is found in the following chapter. I introduce these centers here merely to show the contrast between Rio's digital inclusion and social exclusion policies.

2011; Agyeman and McLaren 2014; Gaffney and Robertson 2016). Meanwhile, as citizens embrace the benefits of their newfound, state-sponsored technological access, residents of these same communities are simultaneously fighting state-sponsored social exclusion through incursions into their public transportation via the cancelled bus routes.

After viewing the Naves, what initially struck me were the vast economic and human resources placed into these centers that aim to promote both digital and social inclusion. According to Rio's Secretary of Science and Technology, Franklin Dias Coelho, "Our mission with the Knowledge Squares is to overcome these [social and technological] differences and integrate the city" (Cruz 2013). While Rio's Naves offer digital education classes and instruction through interactive computers, digital inclusion efforts such as these appear to focus primarily on the physical availability of the hardware necessary to facilitate Internet access. The City's history with social exclusion of its North and West Zone residents, coupled with its recent efforts to prevent residents of these communities from visiting public spaces in the South Zone, imply that Rio's technological and social divides are separate issues that must be dealt with individually. However, the political and legal challenges presented by digital inequalities are to expand technological access while promoting social inclusion (Warschauer 2003). If the Internet is indeed a societal mirror, then the threads of digital inclusion and social exclusion must be inherently interlaced. Access to the digital world is not enough when access to the physical world is restricted.

Conclusion

This chapter employs the metaphor of the Internet as a societal mirror to examine the challenge of pursuing democratic Internet governance in a society that is in many ways undemocratic. Through its grant of "Internet access for all," the MCI presumes that all Brazilians have equal rights of citizenship. However, the idea of citizenship in Rio de Janeiro — and in Brazil more broadly— is a fraught concept. In Rio, the benefits of formal citizenship rights are reflected through geographic boundaries that provide divergent forms of societal access for the city's disadvantaged population. Such divergent access comes in the tangible form of exclusion from public spaces, as shown through the city's eliminating bus routes that would allow North Zone residents access to South Zone beaches. Additionally, as shown by Rita's feelings of ostracism from certain businesses in her own South Zone neighborhood, exclusion also comes through the form of walls (both tangible and intangible) that divide these various communities along the lines of race and class. While Rio's inequity is fueled by the geographic boundaries that underlie its racial and class divides, such inequalities also affect Internet access and engagement. Bete's limited social media network and Rita's reluctance to frequent South Zone establishments with free WiFi stand out as examples.

In addition to being a societal mirror, the Internet and access to it is also a connection —a connection that links friends, families, neighbors, communities, and worlds. When Internet access is open, the connection brings unlimited potential. When access is limited by societal inequalities, however, the potential of the

connection is limited and can only reflect the social inequity to which it is subjected. Therefore, closed or limited Internet access is also like a mirror, with the black screen of the disconnected device serving merely as a reflection of societal inequalities. In the following chapter, I explore one aspect of such societal inequalities by examining the impact of violence (or the threat thereof) on Internet access in a favela in Rio's North Zone.

CHAPTER THREE

Digital Access Amongst the Marginalized

Until the impeachment of former president Dilma Rouseff in August 2016, the progressive Partido dos Trabalhadores (The Worker's Party, or simply "PT") had controlled the Brazilian presidency since 2003. One of the primary aims of the PT was to reduce decades of social and economic inequalities that have plagued Brazil since before its military dictatorship, which began in 1964. Inclusive PT programs such as Fome Zero (Zero Hunger), Minha Casa, Minha Vida (My House, My Life), and Bolsa Familia (Family Allowance) sought to bridge these societal divides through financial incentives that fought hunger and provided housing and education to low-income Brazilian families. Despite these laudable efforts, inequality rates in Brazil's largest cities remain among the highest worldwide (Chia 2016). While the PT's federal assistance programs sought to mitigate extreme inequity, understanding "the close relationship between digital division and social inequality" is also paramount to the well being of Brazil's economy and the social inclusion of the disenfranchised (Patry 2014: 15). By codifying Internet access as a requisite for civil rights, the Marco Civil da Internet (MCI) —a recently adopted law regulating the online realm— becomes an important node through which law shapes the technological struggles of those facing digital inequalities.

This chapter examines how the MCI's attempt to further the right of Internet access unfolds in the marginalized communities of Rio de Janeiro. Article 4 of the

MCI promotes the right of "access to the Internet to all." Yet, for residents of these communities, does Internet access indeed further a more democratic society? And what effect has the MCI had on the ways that favela residents use and understand digital technology? To answer these questions, I seek to build upon previous analyses of Brazilian democracy, and employ the tech parlance of "openness", to investigate how the right of Internet access functions in Rio's disadvantaged communities. Prior analyses of Brazilian democracy have shown that crime, and its accompanying violence, erodes citizens' rights and segregates social groups (Caldeira 2000). Yet, from a technological perspective, openness is an ideology meant to promote the circulation of ideas (Kelty 2005). Building upon these analyses, and upon my fieldwork in Rio, I draw on the idea of Brazil as a disjunctive democracy (Caldeira and Holston 1999; Caldeira 2000; Holston 2008) to show that violence and informal governance in urban favelas creates a disjunction in Internet access and elicits alternative perspectives on digital inclusion. The MCI's goal of promoting the right of access to the Internet is therefore tied to a number of broader socio-political realities and risks in these urban communities.

The Marco Civil - Internet Access as a Civil Right

In early 2015, while I was conducting fieldwork in Complexo da Maré — a favela in the North Zone of Rio de Janeiro, which lies far from the tourists and trendy beaches on the southern end of the city — a friend and resident of the community, Allyson, offered to show me around. Allyson is a slim, brown-skinned, 27-year-old musician

who has lived with his family in Maré all his life. As a professional musician, Allyson is technologically savvy because he regularly uses computers, sophisticated software programs, and other forms of digital technology for his work. As Allyson and I walked casually through the favela during my first visit to Complexo da Maré, he mentioned that his landlord had just given him notice to vacate his apartment and that he would soon have to move. Allyson had other housing options in Maré and didn't appear too concerned. He did seem somewhat amused, however, when he noted that his landlord had sent him the eviction notice via Facebook. Allyson told me, very sarcastically, that he found it ironic that his landlord was using the Internet —the supposed tool for mitigating Brazil's myriad inequalities— as the preferred platform for serving an eviction notice. Due to surging mobile phone use, Internet access in favelas like Maré has grown significantly in the last 5 years (Holston 2013; Patry 2014) and, according to Allyson, receiving these types of formal correspondences through informal social networks such as Facebook is becoming more common in favelas throughout Rio.

According to a 2011 United Nations report, the Internet "has become an indispensible tool for realizing a range of human rights"²⁶ and, as Allyson's Facebook notice suggests, it is also an indispensible tool in urban favelas. Indeed, for a range of underserved communities across the globe, the Internet is necessary for a variety of tasks that enable citizens to gainfully engage in civil society (van Schewick 2015). As

²⁶ See U.N. Human Rights Council, "Report of the Special Rapporteur on the Promotion and Protection of the Right to Freedom of Opinion and Expression," ¶ 85, U.N. Doc. A/HRC/17/27/ (May 16, 2011).

legal scholar Barbara van Schewick notes, "now more than ever, Internet access is necessary to secure full participation in [a country's] economy and democracy (2015: 7). In Brazil, the recent adoption of the MCI —the country's "Internet Bill of Rights"— means that issues of Internet governance and digital access are now receiving the attention they deserve. But, what is Internet governance? How is it relevant to Brazil's disadvantaged communities? And what political and legal factors influence the state's reliance on digital access to promote a more democratic society?

Internet governance is a phrase that has gained traction in the global tech community in recent years. To the uninitiated, however, the term evokes uncertainty and even confusion. How can the Internet be governed when cyberspace is inherently open and transcends international boundaries? At the same time, countries are sovereign territories and have laws that must be respected. Science and technology studies scholar Laura DeNardis (2009) sheds light on these conflicting interests by suggesting that Internet governance involves a broadly conceived orientation that takes shape in four areas: critical Internet resources, intellectual property rights, communication rights, and security. Critical Internet resources relate to Internet Protocol address space and management. Intellectual property rights refer to ownership interests in trademarks, patents, and copyrights. Communication rights, conversely, involve freedom of speech, expression, and association, as well as privacy concerns. Meanwhile, because of the open and worldwide aspect of the Internet, DeNardis notes that security involves a wide variety of concerns including the "roles of national governments, the private sector, individual users, and technical

communities" (DeNardis 2009: 19). Indeed, the Internet is not just a series of cables, protocols, and networks composed solely of material infrastructure; it has traditionally been an open and neutral network that represents an ideology about how the world works and how the world should work (Morozov 2013).

In Brazil, discourses of "openness" generally refer to *cultura livre* (free culture) and its support of free or open access to intellectual property (Lippman 2014; Mizukami and Lemos 2010). As it relates to Internet access, however, I employ a related definition of openness championed by Christopher Kelty (2005). In his insightful study of technocratic "geek" culture, Kelty argues that openness is a liberal ideology espoused by those responsible for the long-term sustenance of the Internet that promotes the circulation of ideas. Kelty claims that this ideology also represents the legal and technical structure of the Web itself. According to Kelty, those "arguing for more openness are essentially saying that technologies can, in fact, relegislate the structure of democracy" (2005: 188). Efforts to advance democratic use of the Internet must therefore consider the dual characteristics of openness when contemplating a framework for Internet governance.

In a widely read 2007 editorial, Brazilian legal scholar Ronaldo Lemos established the basis for Internet governance by arguing that lawmakers could not define crimes on the Internet in Brazil's criminal code without acknowledging the corresponding rights and responsibilities of individual citizens, businesses, and governmental bodies (Lemos 2007). To develop this concept, Lemos and a team of researchers from the Center for Technology and Society at Fundação Getúlio Vargas

Law School partnered with Brazil's Ministry of Justice to begin drafting the legislation that would become the MCI. With the foresight to understand that legislating these complexities involves many actors and should be a participatory process, consultation for the original version of the MCI, which was sent for approval to the Brazilian Congress in 2011, included contributions from civil society, academics, Internet companies, and the tech sector. Internet users were allowed to make suggestions via tweets (Patry 2014: 11). Due to concerns from the copyright industry, which opposed the idea of court orders to take down infringing content, and opposition from telecom companies that opposed net neutrality, the bill lost steam for a few years. However, enacting the MCI was made a constitutional priority by the Brazilian government after Edward Snowden's disclosures regarding U.S. espionage. Former President Dilma Rousseff harshly criticized this U.S. spying in a September 2013 address to the United Nations, calling it a breach of democracy and international law. In her speech, Rousseff demanded Internet regulation based on "open, multilateral and democratic governance, carried out with transparency by stimulating collective creativity and the participation of society, governments, and the private sector."²⁷ The MCI was enacted into law in April 2014.

As the evolution of this law suggests, at both the global and local levels, the stakes of Internet governance deal directly with the right to control and build the platforms of democracy (Kelty 2005).

²⁷ Statement by former Brazilian President Dilma Rouseff at the opening of the general debate of the 68th session of the United States General Assembly, New York, September 24, 2013. Accessed August 15, 2015.

http://gadebate.un.org/sites/default/files/gastatements/68/BR en.pdf.

In brief, the "civil rights framework" established by the MCI sets the standards for openness, net neutrality²⁸, freedom of expression, privacy, promoting innovation, and limiting the liability of intermediaries (Lemos et. al. 2015). Furthermore, pertinent to digital access and openness in marginalized communities, Article 4 of the MCI grants "the right of access to the Internet to all." Equally important is Article 27, which suggests that "public initiatives to promote digital literacy and use of the Internet as a social tool should: 1) promote digital inclusion, 2) seek to reduce inequalities in access and use of communication technologies, especially between different regions of the country, and 3) foster production and dissemination of information technology and communication content." Therefore, as espoused by the Brazil's MCI, Internet access is fundamental to democracy and inherently accompanies civil rights. In addition, through its call for openness, promotion of the right to Internet access, and protection of net neutrality, the MCI promotes the dual characteristics of openness by advancing an Internet structure and ideology that promotes the free circulation of ideas.

But for residents of Brazil's disadvantaged communities, does the MCI's promise of access as a civil right further a more democratic society? And what effect

²⁸ Net neutrality is a founding principle of the Internet that aims to promote freedom and openness in the ideology and structure of the Web. This principle suggests that all Internet users should be able to access any Web content and use any application they choose without restrictions or limitations imposed by telecommunications providers. It guarantees that telecom providers remain mere transmitters of information and do not discriminate between different users, their communication or content accessed. Additionally, it means that all data should be treated equally and be sent to its destination with equal speed regardless of who sends them or receives such data (Patry 2014). I discuss net neutrality in the context of the MCI at length in Chapter 4.

has the MCI had on the ways that favela residents use and understand digital technology? The following section addresses these concerns.

Smartphone Use in Complexo da Maré

Complexo da Maré is a massive favela of approximately 130,000 residents. With its immense size and population density, Maré is effectively a small city within the larger city of Rio de Janeiro. On a sunny summer afternoon in January 2015, the temperature in Rio exceeded 100 degrees Fahrenheit and the humidity was unpleasantly intense. As we walked through the fierce heat of the Complexo, I had the ethnographic impulse to take pictures and record my observations. However, Allyson suggested I keep my smartphone in my pocket. I was a foreigner in his community, but thought Allyson's presence gave me a license to do such things. Although implicit, Allyson's "no photography" rule was similar to injunctions issued in other favelas. For instance, in her ethnographic account of the production and commodification of "spectacular" violence in Rio's Rocinha favela, Erika Robb Larkins notes that in certain neighborhoods photography was prohibited because "Photographs or, worse yet, video could provide the police with important information for their endless but ineffective pursuit" of favela traffickers (2015: 3). Indeed, given the political dynamics of Maré, Allyson's precaution was wise.

In addition to being occupied by the Brazilian army, which began its residence in the favela just months before Rio hosted the 2014 World Cup, Maré is home to three rival drug factions that compete for control of favela territory (Ashcroft 2015).

When we reached a notorious intersection in the favela, Allyson alluded to this territorial conflict by pointing to the countless bullet holes in the buildings. I asked him about the origins of this turf war, but Allyson made it clear that these matters should not be discussed while walking through the favela, when others might be listening. With this social background in mind, I knew of Maré's fraught political climate. However, as a newcomer to the favela, I was only remotely aware of how this highly complex structure of local governance feeds Maré's tensions.

Throughout recent history, favelas have remained on the geographic, social, and economic margins of Rio de Janeiro (Arias 2004; Fischer 2008; Goldstein 2003; Perlman 2010). Favelas lack proper sanitation, reliable security, formal educational systems, and adequate participation in the democratic process. These urban communities materialized in the early 1900s when low-income workers constructed homes in the undeveloped hillsides of Rio. During the military dictatorship (1964-1985), favela community associations became intermediaries between residents and Rio's city government but focused their efforts on preventing evictions rather than on increased public assistance. When the dictatorship ended in 1985, Brazil's new democracy lacked the security resources to prevent the rise of organized drug cartels in these same communities. Since the end of the military dictatorship, well-armed drug gangs have occupied many of Rio's favelas and challenged the authority of police patrols, formalized businesses, and the installation of government services in favelas. As Ben Penglase notes, the drug gangs depend upon "divisions and tensions between various state actors," which enables them to "alternately impose their own

rules in favela neighborhoods" (2009: 47). These disruptions allow "state and nonstate actors [to become] co-participants in the creation of a state of (in)security whose effects shape daily life throughout the city of Rio de Janeiro" (Penglase 2009: 47). The confrontation between state and nonstate actors, and its corresponding violence, creates a disjunction in Brazilian democracy that erodes citizens' rights, segregates various social groups, and destabilizes the rule of law (Caldeira 2000: 52). Indeed, as Teresa Caldeira and James Holston have argued, in Brazil's political democracy "civil rights are not experienced, perceived, or appreciated as common rights of citizenship" (1999: 717). Investigating how the right to Internet access unfolds in favelas such as Complexo da Maré reveals this disjunctive pattern.

As we continued our walk through the Maré, Allyson explained that it was fine to use my phone in private and that it would even be permissible to use the device in semi-public spaces (e.g., inside stores, restaurants, bars, etc.), but public spaces were off limits. I would later come to learn that Allyson's "no photography" rule was not due to his concern about the theft of my iPhone per se, but related to his regard for my physical safety because of the trafficker retaliation that might occur for photography in Maré's public spaces. Allyson's advisory was distinguishable from warnings I had received about smartphone use in other parts of the city. My interlocutors often warned me, for instance, that theft was the primary concern in certain parts of *Zona Sul* —Rio's "South Zone," an area generally considered the wealthiest and most tourist-friendly in the city— and that I should be cautious when using my phone in that area. Muggings were a common occurrence in Zona Sul, and

using smartphones or other expensive gadgets in public often made one a target of such transgressions. Moreover, *gringos* from Europe and the United States often carried costly iPhones, which were the most expensive mobile phones in Brazil and indexed the wealth and privilege of their owners. Using an iPhone in certain parts of Rio could make one a target because poorer Brazilians would use (and could only afford) less expensive models.

As of July 2013, James Holston (2013) estimated that approximately forty percent of Maré residents owned smartphones or tablets. Considering the newfound popularity of smartphones in places like Maré and given the fact that mobile technology is now the primary mode of Internet access in Brazil (Patry 2014; Sandaña 2015), I initially found Allyson's "no photography" rule curious. Yet, he assured me that it was merely a precaution and that many Maré residents refrain from using their cell phones publicly to avoid trouble from drug gangs. During my numerous visits to Maré, I observed residents freely using their cell phones. Still, given the recent proliferation of the devices both in Brazil and its favelas, the visible public use of cell phones was not as common as I had anticipated in a community the size of Maré.

The recent controversy surrounding Maré's community-run Facebook page, Maré Vive, helps us understand Allyson's "no photography" precaution. Since its inception in March 2014, Maré Vive has become a focal point for news and information about life in the favela. Problems for Maré Vive's Facebook site arose when someone started a faux Maré Vive Facebook page with posts denouncing many

of Maré's *traficantes* (drug dealers). These derogatory posts included photos of several of the drug dealers in question. Without any links or other distinguishing features noting the source of the photos (i.e., the fake Maré Vive FB page), they were shared via Whatsapp using the hashtag #marevive. Needless to say, the *traficantes* were not pleased by the unwelcome public exposure. Death threats to the creators of the original Maré Vive Facebook page soon followed and the *traficantes* began policing the cell phones of residents with hopes of finding (and punishing) the informants (Larozza and Fidalgo 2015). Allyson told me that incidents like this were the reason he employed a "no photography" rule while in certain parts of the favela.

The above narrative indexes the fact that access to the Internet often conflicts with the "no photography" rule that exists in certain favela neighborhoods. This conflict undermines the right to Internet access and causes a disjunction in the democratic objectives of the MCI. While everyday violence (or the threat thereof) can impact the way favela residents use and engage with digital technology, the following sections show that disjunctions in democratic rights elicit alternative perspectives on Internet access for the disenfranchised.

Internet Access and the Law of the Hill

Although digital access and inclusion is considered a "development tool" in fighting poverty and illiteracy (Patry 2014: 14), even mundane or non-instrumental technological practices in favelas "shed light on the importance of technology in a variety of dimensions within people's lives" (Nemer 2016: 364). For instance, David

Nemer and Guo Freeman (2015) suggest that in order to understand selfies —a practice where a person uses a smartphone to post their own picture to social media, which is thought to exude narcissism and self-promotion in the West— one must consider the dense sociocultural contexts of the communities in which they are taken. Nemer and Freeman draw on ethnographic fieldwork in the favelas of Vitória, Brazil, where residents often post selfies to online platforms like Facebook, not to seek attention, but to express their feelings about life in the favela. Because such Facebook posts could potentially expose the traffickers who control their communities, the residents do so under threat of violent retaliation. Nemer and Freeman argue that when marginalized users are experiencing censorship and other forms of repression, posting selfies to social media serves as a nonverbal outlet to "fulfill their desires for equity, power, and confidence" (Nemer and Freeman 2015: 6). The importance of Internet access in favelas is therefore shown through everyday digital activities, like the ability to post selfies, which can empower residents in the face of trafficker censorship.

Trafficker censorship manifests in various ways and is not specific to Vitória's favelas, as my own experience in Complexo da Maré indicated when Allyson cautioned me to keep my cell phone in my pocket. Unlike the favelas in Vitoria, however, many of Rio's favelas are undergoing a multidimensional, state-led reform strategy known as "pacification" to disarm gang-controlled territories, combat violent crime, and to launch more formal governance into these previously excluded territories. Pacification policy introduced the arrival of heavily armed police forces,

known as Unidade de Policía Pacificadora (UPP), that seek to destabilize drug gangs and illegal militias while installing economic formalization initiatives. This policy is significant because Rio's favelas have historically lacked formal state governance. The urban development arm of pacification, the UPP Social, was also established to funnel financial resources and social programs --including digital inclusion initiatives— in favelas throughout the city (Scott 2016). Since its inauguration in late 2008, pacification has been lauded for lowering crime rates, introducing new social programs, and inserting improved infrastructure in favelas. However, there has been great debate about the success of these pacification programs, which have been denounced for extreme human rights violations and continued police violence (Ashcroft 2015; Scott 2016). Although favelas like Maré have had only limited success with police occupation, digital inclusion — the idea that increased access to technology can benefit society by serving as a means to increase democratic participation, help reduce violence, and incorporate favelas into Brazil's formal economy - remains pivotal to the state's efforts to redefine the economic and political conditions in favelas.

The idea that digital technology is key to conquering urban inequalities has recently gained steam among academics, government officials, and the tech sector (Gaffney and Robertson 2016). To be sure, the MCI's goal of promoting democracy through Internet access as a means of empowering Brazilian citizens, especially the marginalized, calls to mind "the will to improve" — a practice where experts diagnose problems and devise interventions with hopes of improving both the

landscape of cities and the livelihood of citizens (Li 2007). Technologically speaking, however, the situation in Complexo da Maré resonates more closely with Evgeny Morozov's (2013) recent work, which offers a cautionary theory arguing for the limits of "technological solutionism," a pathology that seeks to use technology to solve society's problems. According to Morozov, these micro-level technology solutions and the push for all things "smart" (i.e., gadgets, communities, cities, etc.) are dramatically changing the way we interact within human society. The increasing use of technological solutions to solve societal problems, both small and large, will have significant, unforeseen affects on politics, culture, and even morality (Morozov 2013).

Digital inclusion notwithstanding, the uncertainty regarding technology's ability to address societal inequalities and promote democratic inclusion is a common trope in literature on smart cities —those cities that use digital technology to mitigate urban inequalities, control emergency services, and enhance public safety and transport (Agyeman and McLaren 2014; Allwinkle and Cruickshank 2011; Gaffney and Robertson 2016). Since being named the "2013 Smart City of the Year" by the Smart Cities Council (Enbysk 2013), the digital "smartness" of Rio de Janeiro has come into question. In examining Rio's smart-city infrastructure Gaffney and Robertson (2016) suggest, "the smart city paradigm is not capable of addressing the most pressing needs of cities with chronic deficits in urban infrastructure and an absence of robust civil society institutions" (2016: 2). Because Rio's smart-city technology is concentrated in the wealthy areas of the city at the expense of the

poorer peripheral regions, they argue that smart technologies may exacerbate Rio's longstanding socioeconomic and political divides (Gaffney and Robertson 2016).

While the MCI seeks to promote democratic access to the Internet, the corresponding problems of increased digital access were made clear during my fieldwork in Maré. Recent estimates indicate that more than 85 percent of favela residents now have mobile phones (Keating 2014). Yet, because of the influence of local drug gangs, many residents feel uneasy when using these devices in public. One Maré resident, who worked in the computer lab of the favela's corporately funded NGO, told me:

Traffickers are suspicious, especially of people they don't know. They are always concerned that someone will post incriminating information about them on the Internet. Most of them try to remain anonymous, at least on Facebook. Thus, they don't like smartphones because they think you'll put their picture on the social media. Have you heard the story of Tim Lopes? Foreigners like you should know about Tim Lopes.

On several occasions during the course of fieldwork, I had indeed heard the disturbing story of Tim Lopes. Lopes was an investigative reporter for Brazil's largest television network, Rede Globo. While working undercover in 2002, Lopes recorded footage implicating certain gang members in Complexo do Alemão, which is located less than five miles away from Complexo da Maré. After the footage was broadcast on national television, Lopes was subsequently kidnapped and tortured, and his dismembered body was placed in a *micro-onda* (a burning stack of tires, known as a microwave oven). Indeed, Jason Scott's (2016) ethnographic research in Alemão suggests that "everyday violence [is] a vital element of digital inclusion in marginalized urban communities" (2016: 106).

The trafficker censorship that comes in the form of the "no photography" rule is just one example of the *lei do morro* (law of the hill) — a type of violent informal governance that local drug traffickers have established in certain favelas (Penglase 2010). The *lei do morro* indexes a Brazilian dichotomy, one that illustrates the contrasting rules at play between the formal tenets of *o asfalto* (the asphalt or street) and the informality of *o morro* (the hill or favela). Sponsored by the lei do morro, the "no photography" rule is a technique adopted by traffickers that causes a disjunction in the right to Internet access in urban favelas.

Para Inglês Ver?

As evidenced by the installation of computer-training centers, wireless Internet, fiberoptic cables in or near marginalized communities, and two downtown "smart city" centers (Gaffney and Robertson 2016), the City of Rio de Janeiro views digital access as a means of using technology to promote democracy. Rio's City government is taking a practical approach to inclusion by launching its new *Naves do Conhecimento* ("Knowledge Squares" or "Naves") initiative (Cruz 2013). According to Rio's Secretary of Science and Technology, Franklin Dias Coelho, the vast economic inequalities in Rio result in a city that is "not only socially fragmented, but also digitally – in terms of opportunity, information, and knowledge" (Sutton 2015). Situated in different disenfranchised neighborhoods with the most need for technological resources, there are nine Naves, which are high-tech community centers that aim to promote digital and democratic inclusivity by connecting local residents to

the digital realm with free public access to the Internet, laptops, tablets, and digital skills training. Moreover, according to Coelho, the Naves represent "physical elements in the landscape that reinforce the need to bridge the [economic] differences" (Sutton 2015).

After countless visits to the various Naves, my first field trip to the Nave in the Madureira district of Rio remains the most salient. Vanessa, a 30-year-old PhD student and lifelong resident of Cantagalo — a pacified favela in Rio's South Zone, accompanied me. Since her teens, Vanessa frequented Madureira for its rich Afro-Brazilian culture and its famous sambas. After touring the facility, I was thoroughly impressed by the visual presentation of the Nave. The center, which was only four years old at the time, was the newest building in the neighborhood and materially presented digital technology as fresh, clean, and new. The Nave was the sole building in Madureira Park and, because it was recently developed, clearly stood out from other buildings in the neighborhood. Inside the center were fancy interactive computers and numerous terminals for desktop computer access. The Nave also offered weekly digital skills training classes. In Brazil, and in Latin America more broadly, there is a long tradition of *limpeza* ("cleaning") as the removal of unwanted social types (Dent 2016). Social cleanliness is therefore thought to dovetail into discourses of security and governance. This is relevant because most of the Naves are located near favelas or other marginalized communities, which are historically thought to lack security and formal governing mechanisms. The materiality of the

Nave thus indexed the center as a kind of safe space, one where residents could come to feel secure while at the center.

While I was focused on the materiality of the Nave and the security it evoked, Vanessa viewed the center through a different lens. She was cynical of digital initiatives like these that targeted poor communities and suggested that, during the lead up to the 2016 Rio Olympics, they were merely para inglês ver (for the English to see). Vanessa claimed that the common Brazilian phrase para inglês ver refers to something done simply for appearances or "just for looks." She told me that after living all her life in the favela, she had seen first hand how city officials exclude and neglect those communities. From Vanessa's point of view, any development taking place near the favela was not just for the benefit of those communities but, because of the forthcoming 2016 Rio Olympics, was meant to cast a favorable light on the city and was thus para ingles ver. According to anthropologist Peter Fry (1982), there are two origin myths regarding para inglês ver. Both myths, which originate in colonial times, examine the relationship that existed between England and Brazil and both relate to Brazil's measures to placate England in trade relations. From this historical perspective, para inglês ver suggests a hierarchy in which the subordinate party makes a promise that they have no intention of fulfilling. The phrase has evolved to be used in situations where one seeks to maintain certain appearances in front of others who might act hostilely if they knew the truth (Fry 1982). Being both a lifelong favela resident and a PhD student, Vanessa occupied a unique positionality in that she regularly transitioned between the asphalto and the morro and therefore understood

the complicated dualities of life in Rio de Janeiro. By invoking para inglês ver Vanessa was expressing her doubts, not about the virtues of the Naves per se, but about the perceived altruism of city planners and the motives behind their efforts to bridge societal gaps.

With the realization of broader Internet access comes the corporate push to capitalize, and companies like Microsoft, Google, Cisco, and Facebook have led the charge. Microsoft and Google are mapping favelas to track the buying habits of residents and sell advertising in these communities (Walker 2014). However, understanding the cultural dynamics of urban favelas presents unique challenges for foreign tech companies. For instance, on more than one recent occasion, tourists using Google Maps to navigate their way through Rio mistakenly entered favelas and were accosted by local traficantes (Opray 2016). Although not a clear example of the "no photography" rule, the Google Maps case demonstrates that the lei do morro works in unpredictable ways (Penglase 2010) and that laws promoting Internet access must consider the social and cultural dynamics of urban favelas. For its part, Facebook has partnered with the Brazilian government (Freire 2015) with the aim of using digital inclusion to increase access to public services such as health, education, culture, work, and technology. Along with the Naves, digital inclusion programs such as the one by Facebook are sure to boost traditional literacy levels and access to employment in the formal economy (Nemer and Freeman 2015; Patry 2014). As part of its digital inclusion initiative, Facebook's first project targets a favela in São Paulo, Heliópolis, for implementing free, high-speed wireless Internet service.

My fieldwork illustrates that the right of Internet access promoted by the MCI is tied to a number of broader socio-political realities and risks in urban favelas. Indeed, both Allyson and Vanessa conveyed their support for open and inclusive Internet access. Yet, they also expressed their doubts regarding the affect that seemingly democratic laws like the MCI have in their communities. In Rio's favelas, such is the dilemma of the right to Internet access, which offers the opportunity to speak and be heard (Tacchi 2012), but also comes with contradictory processes that delegitimize the democratic rights provided therein (Caldeira and Holston 1999; Caldeira 2000; Holston 2008).

Conclusion

In this chapter, I have argued that violence and informal governance in urban favelas creates a disjunction in the right to Internet access and elicits alternative perspectives on digital inclusion. In order to make these claims, I have drawn on my ethnographic work in Complexo da Maré and in the Naves of Rio de Janeiro to elucidate how favela violence (or the threat thereof) works to close or limit Internet access through the "no photography" rule. Moreover, because favela traffickers along with Brazilian state authorities have traditionally been co-participants in a "state of (in)security" (Penglase 2009) that shapes life in these communities, many residents view initiatives that seek to benefit their communities with suspicion. Allyson's rule prohibiting photography in certain parts of his community challenges the MCI's goal of open Internet access. Meanwhile, Vanessa's misgivings about the digital inclusion

initiatives stem from her knowledge of both the morro and the asfalto and the contrasting forms of governance at play in these domains.

As demonstrated when Allyson received an eviction notice via Facebook, Internet access in Rio's favelas has become commonplace. Yet, even mundane, everyday digital practices have the potential to empower residents of marginalized communities (Nemer and Freeman 2015). This potential, however, stems from the ability to freely access and use the technology that facilitates these digital practices. By limiting Internet access in urban favelas, modes of informal governance like the "no photography" rule represent an uneven distribution in the democratic aims of the MCI.

To be successful in the intricate landscape of disadvantaged communities, the democratic goals of the MCI must be coupled with social and cultural changes, changes that often escape the consideration of lawmakers. Just as Internet governance involves a variety of difficult concerns, so too does ensuring the right to Internet access in urban favelas. And just as "civil rights have not been effectively woven into the fabric" of Brazilian democracy, as Caldeira and Holston have argued (1999: 716), it appears that the MCI's pledge of the right to Internet access for all has not been effectively woven into the fabric of everyday life in urban favelas.

While the MCI promotes the right of access to the Internet and helps regulate important concerns in the online realm (e.g., privacy, net neutrality, data retention), the violence and informal governance in urban favelas support practices like the "no photography" rule, which run counter to the MCI's aims by fostering closure and

exclusion. The following chapter examines the MCI's net neutrality protections and how these protections support openness and inclusion in the online realm.

CHAPTER FOUR

Is Facebook the Internet? The Anthropology of Net Neutrality in Brazil

In March 2015, while in São Paulo for the Seminário Marco Civil da Internet: Neutralidade e Proteção de Dados Pessoais - a two-day conference about net neutrality and Brazil's new Internet law, the Marco Civil da Internet (MCI)— one of the panelists asked rhetorically, "Is Facebook the Internet?" Rhetorical or not, the inference that Facebook —the global social media behemoth— was the equivalent of the broader, more comprehensive World Wide Web was thought provoking. The query specifically referenced certain developing markets (e.g., Brazil, India, certain parts of Africa, etc.) where Facebook was offering free, limited Internet access to those portions of the population that lacked access thereto. To be certain, Facebook's social media hegemony was unquestioned. As of early 2017, the social network had 2 billion active users (Bergstein 2017). Additionally, as of April 2012 it wholly owned Instagram (Upbin 2012)—a photo-sharing application with 700 million active users and acquired Whatsapp —a text-messaging application with 1.2 billion active users in February 2014 (Covert 2014). But the panelist's question was not meant to merely address the dominance of Facebook in the global social media landscape. Instead, it was used to introduce a debate about net neutrality —the idea of nondiscrimination in Web traffic— in Brazil. But because net neutrality debates are relevant to themes of openness and innovation in digital communications and technology, as I will show, these debates are also relevant to democracy both in Brazil and in a much broader, global context.

Controversy regarding Facebook and its subversion of net neutrality began in 2013 when Facebook launched Internet.org, a platform intended to provide free, "basic" Internet access to those poor populations in developing countries that are unable to afford the Internet. The free access offered by the platform was limited solely to Facebook's partner websites and applications. Without access to the broader World Wide Web, users of Internet.org essentially experience a "walled" Internet the content of which is determined solely by Facebook. Because Internet.org discriminates against those Internet companies that are not affiliated with the promotion, it received harsh criticism by critics who feel that the Internet should be a free and open platform for all of its users, which is a foundational principle of the Internet and a core value of net neutrality.²⁹ After being rebranded as "Free Basics" in September 2015, the promotion was banned in India³⁰ and is under similar threat in

²⁹ In the 1960s, computers and computer-mediated communication loomed as "technologies of dehumanization, of centralized bureaucracy and the rationalization of social life, and, ultimately the Vietnam War" (Turner 2006: 2). With the dawn of the Internet in the 1990s, according to Fred Turner, computers and computer technology transcended this cold-war narrative by emerging as a symbol of transformation that offered the possibility of a utopian digital society that was decentralized, egalitarian, and free (Turner 2006). One reason for this utopic optimism is the historical values of the Internet, which also underlie the principles of net neutrality. These values, which include individual user freedom, freedom of information access, and promoting economic competition, are engineering mechanisms embedded in the Internet's architecture that aim to create a level plaving field for new information products and technological innovation (DeNardis 2014). ³⁰ After receiving over one million emails concerning this issue in early 2016, the Telecom Regulatory Authority of India (TRAI) —that country's telecommunications regulator— banned such promotions by Facebook and other companies because they violate India's net neutrality protections. The strength of public opinion against Facebook's zero-rating platform, targeted lobbying in support of net neutrality directed by a non-governmental organization, and Facebook's culturally insensitive political pressure, were all factors that led to TRAI's decision (Marsden 2016).

Brazil and other developing markets. Since Facebook (and its partners) literally becomes the Internet for users of this platform, "Is Facebook the Internet?" is not just a rhetorical question; it is also a provocative query about the conflicts between the private interests of Internet service providers (ISPs) and the public's interest in a free and open Internet (Wu 2003). Consequently, "Is Facebook the Internet?" can be used to index debates about the fundamental characteristics of openness, decentralization, and nondiscrimination that are extremely relevant both in Brazil and in today's highly connected, digital world.

This chapter employs this rhetorical question to explore both the regulatory and theoretical aspects of net neutrality in Brazil. From a regulatory perspective, I examine zero rating —mobile phone promotions, often sponsored by Facebook, that provide free mobile data to low-income subscribers— and its suspect legal status under the net neutrality provisions of the MCI. Net neutrality aims to promote a free and open Internet, while zero-rating practices provide limited Internet access via measures that control and block the content users may retrieve. Theoretically, I juxtapose the values of net neutrality with the ideals of Brazil's *cultura livre* (free culture) —a movement recognized both in Brazil and globally in which computer programmers seek to supply free or open-sourced access to intellectual property and cultural production (Shiver 2010; Lippman 2014). Through this comparison, I argue, we get a sense of the collaborative and networked potential of an Internet modeled in favor of the public good. In addition, this rhetorical question "Is Facebook the Internet?" also provides a glimpse of the influence that dominant Western tech

companies often have in the Global South. In examining net neutrality in Brazil, I argue secondly that the globalizing tech practices of companies like Facebook perpetuate longstanding dependency cycles that have plagued the relationship between Brazil and its Western counterparts. While the focus is indeed Brazil, the discussion and analysis here is relevant for similar debates that expand well beyond that country's borders.

Zero-Rating – An Ethnographic Introduction

Living as a foreigner in Brazil means learning to cope with an endless amount of bureaucracy (see DaMatta 1991; Caldeira 2000; Barbassa 2015; Willis 2015). During my first week of extended fieldwork in December 2014, I got a taste of Brazilian bureaucracy —"a legacy of the Portuguese monarchy that stretched over centuries in a tangle of red tape that ensnared the simplest operations" (Barbassa 2015: 87)— while trying to get a subscriber identification module (SIM) card for my iPhone. In Brazil, you need a *Cadastro de Pessoas Físicas* (Register of Physical Persons or CPF) number to purchase anything of significance. Similar to a US social security number, a CPF is an individual taxpayer identification number issued by the Brazilian Federal Reserve that monitors the revenue-generating activities of both Brazilians and resident aliens. In order to purchase a SIM card, I had to first secure a CPF.

I had a vague idea of the procedure involved in this process, but I was unsure of the specific protocol. When I went to the TIM (the Brazilian subsidiary of Telecom

Italia Mobile and also Brazil's second largest mobile phone provider) store to inquire about getting a SIM card, the TIM representative told me I would need to first get a CPF and sent me to the *Poupa Tempo* (a name that ironically means "to save time"). *Poupa Tempo* is an agency that facilitates various sectors of the Brazilian economy (federal, state and municipal, national and international seminars, trade associations, universities and others). I went to the *Poupa Tempo* in Ipanema, which is located at the base of the Cantagalo favela, with hopes of securing a CPF. I arrived at the *Poupa* Tempo, waited in line for about 45 minutes, and was then told that the Poupa Tempo was not where I needed to go. Poupa Tempo sent me to another bureauracratic agency in Ipanema. When I arrived at this agency, they informed me that I was in the right place. However, after waiting in line for 45 minutes at this second location, I was informed that before I could get the CPF I had to go to the Correio (Brazilian post office) for an Inscrição do CPF (Registration of CPF). Thus, I was off to the Correio where I had to wait in line, again for about 45 minutes, for my Inscrição do CPF. After the requisite wait in line, I left the Correio with my CPF in hand, and returned to the agency in Ipanema where, again, I had to wait about 45 minutes until finally securing my CPF.

Reflecting on the day's bureaucratic runaround called to mind journalist Juliana Barbassa's (2015) frustrating account of her experience attempting to rent an apartment in Rio de Janeiro. In dealing with the "labyrinth of paperwork" (2015, 89) required to accomplish almost anything of significance in Brazil, Barbassa noted, "each step I'd take toward completing a task I assumed would be simple —getting a local credit card, registering for health insurance, signing a lease— would instead reveal a myriad other smaller steps that needed to be taken first. The harder I ran, the deeper I found myself within this perverse hall of mirrors," (Barbassa 2015: 88). Simply trying to obtain a CPF took about six hours in the intense spring heat of Rio and I still had not fulfilled the original purpose of my adventure, which was to secure a SIM card. By the end of that ordeal, I was tired and the CPF escapade was enough for one day. Additionally, evening was fast approaching and the TIM store would be closing soon. I headed home for the day and planned to venture out first thing the following morning to purchase the SIM card from TIM.

The next morning, as I sat in the lobby of the TIM store, I observed the scenery around me. The sun shone brightly as I looked out onto Rua Visconde de Pirajá, which sits just a few blocks from Ipanema beach. Shifting my gaze to the store's interior, I began noticing advertisements for various mobile phone plans. One such advertisement caught my attention. The ad solicited mobile phone subscribers for TIM by offering them free mobile data when using Whatsapp. Whatsapp —the Facebook-owned messaging application that allows users to both send and receive text messages *and* make local, national, and international phone calls— consequently becomes free to subscribers of this promotion. At that time I was only remotely familiar with this marketing strategy, but I soon came to realize that these so-called "zero-rating" schemes had grown to be both extremely popular and controversial with mobile phone providers in the US and in developing countries like Brazil. To be certain, mobile phone subscribers are subject to "data caps," which prevent use of the

Internet once the allotted amount of data has been reached. "Zero-rating" (also known as "sponsored data") refers to the practice in which mobile networks offer free data to customers who use specific services (e.g., streaming videos) or smartphone applications (e.g., Whatsapp). Thus, customers who access this zero rated/sponsored content do not pay for the mobile traffic generated by such use.

In the TIM that day, I met a TIM sales representative named Agatha. Agatha was a dark-skinned Brazilian woman in her mid-twenties who had worked as a sales rep at TIM for a little over a year. She was from *Penh*—an area in the North Zone of Rio—and had about an hour-long commute to work each day at the TIM store in the South Zone neighborhood of Ipanema. Agatha and I spoke to one another in Portuguese. When she heard my accent, she recognized me as an American and smiled. "Meu querido Afro-Americano!" (My dear African-American), she said warmly. Apparently, the fact that I was a black American made her more enthusiastic about assisting me. I told her that I needed a SIM card for my iPhone and shared the story about the bureaucratic obstacle course I endured to secure my CPF. "Welcome to Brazil," she said sarcastically, as if such bureaucratic runarounds were the norm. I was still frustrated by the ordeal and did not find her sarcasm funny. I told Agatha that I was in Brazil for extended fieldwork and that I would be living in Rio for at least the next year. Agatha told me that getting my CPF would be good "practice" for the inevitable bureaucracy I would encounter during my time in Brazil. "I don't know what it's like in America, but what do you think Brazilians have to endure on a daily basis?" she asked rhetorically. Several of my interlocutors had warned me about the

horrors of navigating bureaucratic turmoil in Brazil, but I was curious to know if or how such red tape affected the way people engaged with the Internet. Did the bureaucracy make securing mobile phone Internet access a burden? I asked Angela, "What's it like here for the average person who comes to TIM to sign up for mobile phone service? Do they have to jump through hoops to get Internet access on their phones?" Agatha responded as follows:

It all depends. This is Ipanema and people here tend to have more money than folks in other parts of Rio. For instance, many of the customers here are foreigners like you. They may only need mobile phone service for a limited time and usually have the financial resources to afford it. But even the Brazilians in this area have money. They normally come in to purchase or renew their mobile subscription service. But, again, this is Ipanema and people here have money. People with money know other people with money. And when you know people and have money, you can often find a way around bureaucracy in Brazil. In the North Zone, where I live, things are different. People there cannot readily afford subscription service. If they have a mobile phone, they usually prepay for Internet service on their phones or they find somewhere to use Wi-Fi for free.

It is noteworthy that, in this quotation, Agatha used the Brazilian Portuguese phrase *dar um jeito* (to give, find, or make a way) to describe these bureaucracy-avoiding methods. *Dar um jeito* references the popular Brazilian custom known as the *jeitinho brasileiro*, which is a form of institutional bypass used to avoid the rules and get things done (Barbosa 1995). According to Brazilian anthropologist Lívia Barbosa (1995), while any Brazilian, regardless of their economic or social position, may utilize these mechanisms of social adjustment to emphasize either positive or negative aspects of the Brazilian social system, the social hierarchies in Brazil often mean those with wealth or privilege receive special treatment when compared to their poorer Brazilian counterparts. In this instance, however, Agatha made it clear that

wealth, privilege, and class issues play an instrumental part in the institutional bypass that is the *jeitinho brasileiro*.

How did zero-rating impact Internet access among the various communities that Agatha encountered in her work at TIM? Although she was unaware of the technical term "zero-rating," Agatha was familiar with these promotions that offered Whatsapp for free. "Everyone in Brazil uses Whatsapp," she told me. "So, it's good if you can use it for free. But here, it's only offered for free if you have subscription mobile service with TIM. Most people at this Ipanema location can afford subscriptions. People from my community (in the North Zone) generally cannot," she told me. While low-income residents from the North and West Zones may not be able to afford mobile phone subscriptions, as Agatha suggested, they could still take advantage of zero-rating promotions offered through prepaid mobile plans.³¹

The significance of messaging applications and the zero-rating schemes that make these mobile phone services affordable for so many Brazilians cannot be overstated. In favelas and other underprivileged communities, owning an Internetenabled mobile phone is fairly common. Indeed, recent estimates indicate that more than 85 percent of favela residents now have mobile phones (Keating 2014). However, many mobile phone users in these communities cannot afford the data plans offered by cellphone carriers (Nemer and Tsikerdekis 2017) and therefore rely on free Wi-Fi or promotions like zero-rating to access the web. Additionally, because

³¹ At the time of my fieldwork in 2015, I surveyed the prepaid mobile plans from Brazil's three primary carriers (TIM, Claro, and Oi). While the types and rates of these plans were numerous, zero-rating promotions were an option with each of these carriers.

Brazilian mobile phone carriers generally charge high rates for sending and receiving standard short message service (SMS) messages³², Brazilian mobile phone users have historically not indulged in intensive text messaging. However, because of the surge in smart-phone use and the emergence of zero-rating promotions, text-messaging habits in Brazil are on the rise. Mobile phone users are now much more inclined to send texts through messaging applications like Facebook Messenger and Whatsapp. Indeed, as of March 2015, Whatsapp was the most popular mobile phone application in Brazil and was used by 70% of the country's smart-phone users (Tech in Brazil 2015).

The Prevalence of Messaging Applications in Rio

Throughout the course of fieldwork, I often heard two distinct phrases that conveyed the indispensability of messaging applications in Rio and in Brazil more broadly. Before I arrived for fieldwork in December 2015, several Brazilian contacts told me *"Precisa o Face no Brasil"* (You need Facebook in Brazil). Indeed, my Brazilian interlocutors stressed the importance of having Facebook Messenger

³² Per a June 12, 2017, Facebook message interview with Dr. Konstantinos Stylianou of the University of Leeds School of Law and formerly of FGV-Rio Center for Technology and Society, Dr. Stylianou noted that there are two systems of charging for terminating (in this context, "terminate" means to connect or deliver) calls and SMS messages. According to Dr. Stylianou, most countries, including Brazil, implement the "calling party pays system," which creates the misplaced incentive to charge other networks high fees to deliver their calls and SMS messages. In this model, the prices for calls and SMS messaging tend to be universally higher. By contrast, in the United States, the system employed is called "bill and keep," which is an agreement that no fees are charged for termination. Companies recover the cost only from their own subscribers and not their competitors. This creates an incentive to be competitive and therefore prices are driven down.

installed on my smartphone. Upon my arrival in Rio, I soon learned that very seldom did Cariocas (natives of Rio de Janeiro) make phone calls. They were more inclined to message their friends, family, and even professional contacts using one of these messaging applications. One interlocutor —a law student at Getúlio Vargas in Rio told me that literally within minutes of meeting people in Rio, she receives friend requests from them on Facebook. She also noted that almost every social, academic, and political event happening in the City of Rio de Janeiro is advertised with its own Facebook events' page. My fieldwork verified these findings. When meeting new people in Rio, the common practice was to exchange first and last names along with phone numbers, which made it easy to find them on social media. Moreover, when I went to the TIM store to inquire about the high cost of my first phone bill (R\$200 for only a month of service), I learned that the high fees were due to my excessive SMS messaging. Agatha told me that if I wanted to reduce the texting fees, I should use a Web-based messaging application like Whatsapp or Facebook Messenger instead. Another informant, Allyson, a lifelong resident of Complexo da Maré-a favela in Rio's North Zone—suggested that prepaid plans were an inexpensive alternative to pricey subscription-based phone plans. According to Allyson, one could easily incur unexpected fees from these subscription plans by accidently exceeding the data allotments. By allowing users to prepay at various price points, prepaid plans were more flexible than subscription services and came without the financial risk incurred by exceeding the data caps. Interestingly, most of my favela interlocutors who had smart phones relied on prepaid plans, while those middle class informants had

subscription service. Regardless of the payment method used (subscription or prepaid), as I became more familiar with the Brazilian lifestyle, I realized that most *Cariocas* did indeed frown upon SMS messaging because of its high cost. Instead, they preferred Web-based messaging applications, like Whatsapp, because they could be used for free with Wi-Fi or zero-rating promotions.

The second phrase that was commonplace related to the ubiquity of Whatsapp in Rio. "Mande me uma mensagem no Zapp!" (Send me a message on Whatsapp) was a phrase that I heard countless times throughout the course of fieldwork. While there were surely other messaging platforms to choose from (most notably, Facebook Messenger and standard SMS messaging), it seemed as if Whatsapp had a monopoly on the Brazilian market. I learned this lesson while messaging my friend Laura, whom I met at *Pedra do Sal*, a famous outdoor samba in *Centro* (downtown Rio). Although Laura was born and raised in Salvador, Bahia, in Brazil's northeastern region, her parents are from Spain. Thus, while Portuguese is her native tongue, she iss also fluent in Spanish and several other languages. Laura moved to Rio from Salvador 10 years earlier and worked at a local university teaching Spanish. While Laura came from a working-class family in Salvador, she made a good living in Rio as a language professor. Indeed, because of her command of multiple languages (she was fluent in Portuguese, Spanish, French, and English), she also worked as a language tutor in addition to her university professor duties. I was one of Laura's clients; she gave me Portuguese lessons at least once a week. With such a busy schedule it was thus surprising that, when we first met, Laura did not have a

smartphone. Instead, she used a mobile phone that could not connect to the Internet. Due to this circumstance, she was the only person I knew in Rio who did not have Whatsapp. If being excluded from the affordances of mobile communication via the Internet is "either an act of defiance, ignorance, or the consequence of material misfortune and disadvantage," as legal scholar Olivier Sylvain (2016: 447) suggests, then Laura's smartphone deficiency was clearly one of defiance. When I wanted to get in touch with her, I either called—a practice that seemed completely anachronistic by the text-messaging social standards of Rio—or we would simply use standard SMS messaging. But because SMS messaging was so expensive in Brazil, there were times that Laura's lack of having a smartphone was an inconvenience. For instance, there was one rare occasion when I could not make it to my weekly Portuguese lesson. Because Laura did not answer her phone when I called, I was forced to send her an expensive SMS message to relay news of my absence. "Why don't you have a smartphone, Laura?" I asked frustratedly. "I know, I know, everyone has them. But, I don't like being tethered to anything. And I know that everyone in Rio has them because Whatsapp is the only way people seem to stay in touch these days. But my schedule has gotten so busy lately that I'll be forced to get one soon, just so that I can communicate on Whatsapp like everyone else," she said.

In Rio de Janeiro, then, communicating through social media applications was a *modo de vida* (way of life); text messaging was the preferred means of communication; Whatsapp and Facebook messenger were the preferred messaging platforms. In addition to person-to-person messaging, group chat—which is used to

share messages, videos, and even web memes with multiple users simultaneously was also commonplace. Whatsapp was so routine in Brazil that it was even used by businesses for publicity campaigns, customer support, internal company communications, news reporting, and delivery services, and former President Dilma Roussef and other politicians have used the application for campaign purposes (see Tech in Brazil 2015).

It is ironic that Facebook and Whatsapp dominate the social media/textmessaging marketplace in Brazil. As I noted earlier, Facebook —an American tech company based in California— wholly owns Whatsapp. Consequently, the largest social media market in Latin American (Ruvolo 2014) relies almost exclusively on a multinational Western corporation to provide its vast social media and text messaging needs. In the introduction to this dissertation, I discuss how the MCI was enacted, at least in part, due to concerns over U.S. espionage in Brazil. In response to such revelations, then-President Dilma Rousseff called on her government to develop policies like the MCI that encourage domestic technological development (Lemos et al. 2015). With these concerns in mind, it is clear that technological innovation is important to help alleviate the absolute reliance on U.S. companies that service the needs of Brazil's Internet users. But just how does the MCI enable such technological innovation? The answer to this question lies in the MCI's promotion of "openness," a concept that I discuss in the following section.

Openness

Although net neutrality should be of vital importance to anthropologists (Golub 2017), very little scholarship exists on the subject within the discipline of anthropology or in the social sciences at large. Anthropologists (and other social scientists) have, however, addressed the related topics of openness, free and openaccess to intellectual property and cultural production, commons-based peer production, and alternative licensing (Coombe 2003; Philip 2005; Kelty 2005, 2008; Coleman 2009, Mizukami and Lemos 2010; Shaw 2011; Chan 2013; Lippman 2014). While these discourses demonstrate how the Internet can be used to create new digital platforms, net neutrality relates to the platform of the Internet itself and shows us how the Internet as a platform provides fertile ground for technological innovation. Before delving into a discussion of net neutrality in Brazil, I provide a brief literature review of open access discourse to set the stage for this chapter's discussion of the net neutrality provisions of Brazil's MCI.

Scholars often refer to the Internet as a free and open network (Wu 2003; Kelty 2005; DeNardis 2014; Sylvain 2016; Belli and De Filippi 2016; Golub 2017). But, just what is meant by "openness?" In his insightful study on technocratic "geek" culture, anthropologist Christopher Kelty (2005) posits that openness has two aspects: ideological and technical. Ideologically, openness represents the liberal views of those engineers, computer programmers, and entrepreneurs who are "intimately involved with the programming and design of [the Internet's] technical infrastructures" (2005, 185). From a technical standpoint, Kelty claims that openness indexes the legal and technical structure of the Web itself. This legal and technical structure consists of the Internet's core protocols (i.e., laws or rules) and architecture that "gives the Internet its present order [and] how it should be ordered in the future" (2005: 186). The dual characteristics of openness therefore inform tech discourses relevant to the Internet, net neutrality, and digital innovation.

Through her study on computer hackers, Gabriella Coleman (2013), examines the ideological side of the openness duality. Coleman shows how hackers have transformed key liberal ideals such as access, free speech, transparency, and meritocracy by arguing that hackers see intellectual property (IP) as a form of restriction that must be counteracted through alternative legal agreements that treat the knowledge, inventions, and expressions that constitute IP not as property but as speech that may be freely shared, circulated, and modified. Meanwhile, law professor Lawrence Lessig (2004) suggests that the legal/technical side of the openness duality is a battle of "piracy" versus "property." According to Lessig, because of the fear that open or "free" culture facilitates piracy, such free culture is generally not supported by the "established content industries" (2004: 9). Similarly, media studies scholar Siva Vaidhyanathan (2004), who studies the digital revolution and how it has amplified the sociopolitical trends of globalization, notes that openness creates a legal tension, which is a division between "anarchy" and "oligarchy" ---with the anarchists being those who support open digital platforms and the oligarchs being those who do not.

In brief, openness is an ideology that promotes the free circulation of ideas (Kelty 2005). Yet, it is also represents the legal and technical structure of the Internet. Together, then, the dual aspects of openness symbolize the infrastructure and ideology of the digital era's unbounded potential. As discussed in the following section, the principles of openness are also embedded in the MCI.

The Marco Civil and Net Neutrality

Net neutrality is a term coined by legal scholar Tim Wu (2003) to describe the idea that all Internet traffic should be treated equally, without favoring certain services or applications over others. Free speech advocate Melody Patry expounds upon this definition by referring to net neutrality as follows:

The principle that all Internet users should be able to access any web content and use any application they choose without restrictions or limitation imposed by telecommunication providers. It is a founding principle of the Internet, which guarantees that telecom operators remain mere transmitters of information and do not discriminate between different users, their communication or content accessed. It means that all data should be treated equally and should be sent to their destination with equal speed regardless of who sends them or receives them (Patry 2014: 4).

Similar to openness, then, net neutrality is more than just a concept or idea; it also reflects the original architectural choices that foster the Internet's open, decentralized network structure, which promotes user creativity and digital innovation. Because Web traffic cannot be influenced by discriminatory delivery mechanisms, net neutrality protects online freedom of expression and individual user choice regarding access to online content (Belli and De Filippo 2016).

The sixth principle of Internet governance established by the Comitê Gestor da Internet³³ (Brazilian Internet Steering Committee or CGI) seeks to protect neutralidade da rede (network neutrality) in Brazil. This principle states, "Filtering or traffic privileges must meet ethical and technical criteria only, excluding any political, commercial, religious and cultural factors or any other form of discrimination or preferential treatment" (Glaser 2014). Prior to the MCI's approval in 2014, one of the more contentious debates in approving the legislation focused on its network neutrality regulations. Lobbyists from Brazil's private telecommunications companies argued that they should be able to manage Web traffic as they saw fit. However, they were met with heavy resistance from Brazilian civil society, academia, the tech sector, and congressional allies who all wanted a democratically managed Internet with equal access for all (Arnaudo 2017). Article 9 of the MCI codifies net neutrality in Brazil and explicitly states that all Web traffic must be treated identically, without regard to source, destination, or content. Because these regulatory characteristics promote the Internet users' freedom of choice in online content, applications, services, and devices (Belli and De Filippi 2016), they are consistent with the technical aspects of openness. Moreover, "net neutrality corroborates the decentralized and open architecture of the Internet, deflating entry barriers to the 'free market of ideas', and thus setting a level playing field for any user to participate in the development of the Internet ecosystem" (Belli and De Filippi

³³ In 2009, the Brazilian Internet Steering Committee (CGI) established 10 defining principles for Internet governance legislation. The MCI is based on these principles, which are discussed at length in the introduction to this dissertation.

2016, 3). Through its open design principles, the Internet and its tradition of net neutrality therefore furthers a level digital playing field, which is pivotal for freedom of expression, access to knowledge, and democratic participation.

While Brazilian legislators worked to secure net neutrality protections through the MCI, zero-rating plans were generating a furor in the tech-policy community. Because zero rating offers the benefit of certain Web content for free by allowing ISPs to select specific content for differential treatment, these promotions are generally considered at odds with net neutrality regulations (Ramos 2014; Marsden 2015). TIM's promotional offer of Whatsapp (discussed earlier) is a prime example. Since TIM offers Whatsapp for free to its subscribers but does not also offer competing messaging applications (e.g., Facebook Messenger, Viber, Signal, etc.) for free with a TIM subscription, these promotions are discriminatory and, in theory, violate the MCI's core net neutrality provisions. Indeed, for the Internet to be an equalizing telecommunications platform, it is essential that all citizens have reasonably comparable access regardless of their economic status or geographic location (Sylvain 2016). As legal scholar Olivier Sylvain (2016) suggests, reasonably fair and impartial access to the Internet is vital "for racial minorities, poor people, and all others who must negotiate structural inequalities in other aspects of their lives in ways that advantaged people do not" (443). Clearly, Brazilians from different socioeconomic backgrounds access the Internet in different ways, as Agatha made clear to me in our discussion at the TIM store. Compared to their South Zone counterparts, for instance, low-income residents from Rio's North and West Zones

are more likely to use a smartphone or other mobile device when accessing the Internet (see also Nemer and Tsikerdekis 2017). And while mobile Internet access surely helps bridge digital inequalities, mobile devices have a narrower range of functionality than personal computers. Despite the inequalities in technological hardware, by ensuring that ISPs must treat all digital content equally, net neutrality protections help maintain a level playing field in the online realm³⁴ (Belli and De Filippi 2016).

While countries like India have banned zero rating practices (Deleon 2016), others have placed limited political commitment into effectively regulating these promotions and by doing so have created a tolerance for zero rating. Such is the case in Brazil, where net neutrality is protected by the MCI, but the regulatory bodies charged with enforcing this legislation have yet to take prohibitive action against zero rating (Marsden 2015). Nevertheless, because of the guidelines established by the MCI, Brazil appears to be on a path towards prohibiting zero-rating promotions (Arnaudo 2017).

A thorough understanding of net neutrality principles makes clear the connection between digital and civil rights. Since there is freedom of speech and association for anyone disseminating lawful material on a communications network like the Internet (DeNardis 2014), net neutrality (and by implication, zero rating) also

³⁴ Conversely, other scholars have argued that unequal access to the hardware that facilitates Internet use (i.e., desktop computers, laptops, tablets, mobile phones, etc.) only benefits networked elites. If this inequity in hardware is not addressed, net neutrality could exacerbate existing inequalities because its beneficiaries are such networked elites (Sylvain 2016).

has continuing implications for democracy. Internet architecture has traditionally been based on end-to-end design principle, which establishes an open and nondiscriminatory network with control and functionality distributed at the end-user level (Belli 2016). This concept has had the ancillary effect of providing end-users with "freedom of expression and innovation in an unprecedented way" (Belli 2016: 15). However, promotions like zero rating allow network operators to control the content that reaches end users. Net neutrality rules act as a safeguard to ensure the free expression of end-users and help prevent censorship in the online realm. Moreover, net neutrality regulations limit so-called "walled gardens" ---restrictions that affect certain types of Internet traffic (Marsden 2016). Because the users' browsing options are limited strictly to zero-rated content, zero-rating schemes create restrictive "walls" in cyberspace. As legal scholar Susan Crawford notes, walled gardens are dangerous because "linking and building are the fundamental attributes of the Internet... but users of a walled-garden 'zero rated' Internet can't even click links that go outside the garden" (2015). By facilitating "walled gardens," zero-rating plans allow mobile networks and ISPs to serve as gateways that can restrict speech and control access to the Internet.

There are competing perspectives at play when analyzing the consequences of zero-rating schemes. On one hand, these promotions have the ability to provide free, limited Internet access to those low-income populations that are most in need. Agatha underscored the importance of this fact to me during our discussion in the TIM store. Because she worked at TIM, Agatha had subscription mobile service, unlike many of

her neighbors in the North Zone who were unable to afford such amenities. She therefore saw firsthand how residents from her North Zone neighborhood craved inexpensive ways to access the Internet.

On the other hand, zero rating has the ability to limit and control the Internet access of these same low-income populations. Mobile phone providers, corporate proponents, and many users of the strategy claim that providing free, limited Internet access to those who would otherwise be unable to afford it is better than those users having no access at all. Moreover, in developing countries, zero rating is thought to strengthen the profits of ISPs through increased sales of mobile phones and data plans (Facebook 2013). However, opponents claim that zero rating is an effort to establish an Internet controlled by large, private corporations, such as Facebook, which is detrimental to free speech and democratic communication.

Similar to the dual characteristics of openness, net neutrality is both a regulatory model and an ideology that represents openness, decentralization, and nondiscrimination, which are rooted in the Internet's history and infrastructure. According to Internet governance scholar Laura DeNardis (2014), these values "are embedded in the design of the Internet's architecture...[and relate to] ...user choice about what information to access and creating a level playing field for the introduction of new information products" (DeNardis 2014: 149). Because these values are embedded into the Internet's architecture, they index a core feature of the Internet's infrastructure, which is the ability to "operate on multiple levels concurrently" (Larkin 2013: 335). Therefore, the Internet simultaneously employs

both the technical function of facilitating Web traffic —often referred to as the "policy principle"— and the more conceptual role of representing the core values of openness, decentralization, and nondiscrimination —the "network design principle"— – upon which the Internet was founded (DeNardis 2014). In a similar vein, net neutrality refers to the network design principal upon which the original Internet architecture was founded. But because of legislation such as the MCI, it has evolved into a policy principal that seeks to preserve the foundational integrity of the network itself. Indeed, the Internet serves as both the infrastructure and the symbol of the information era (Turner 2006). In both its network design and policy principle, then, the Internet can offer insights into the democratic values necessary for the long-term sustenance and public good of the global telecommunications network.

Cultura Livre

Since its inception, the Internet has remained an open and neutral platform that facilitates the transmission of music, motion pictures, art, photographs, cultural property, and other creative works, which can all be freely linked, built upon, and shared. These foundational characteristics frequently run into conflict with conventional intellectual property (IP) laws. Conceptually, the qualities of openness, decentralization, and nondiscrimination, which index the core principles of net neutrality, resonate with what digital activists in Brazil term *cultura livre* (free culture). According to Brazilian legal scholars Pedro Mizukami and Ronaldo Lemos, *cultura livre* is "a loosely organized movement that seeks to apply free software strategies to the broader realm of cultural production" (2010: 31). As this definition suggests, free culture stems from the concept of free software with the term "free" referring to freedom, rather than the lack of any monetary value. While free culture is generally thought to examine the impact of IP laws on technological innovation, access to knowledge, education, and free speech, its moral and political values stress alternatives to the IP status quo and promote a normative desire for open access in the digital realm (Mizukami and Lemos 2010).

A tangible example of *cultura livre* is found in Brazil's *tecnobrega* phenomena. Hailing from the state of Pará, in Brazil's northeastern region, tecnobrega, or "cheesy techno," is an electronic music genre that involves sampling and remixing US popular music with original music from Brazilian producers. The sampled recordings that fuel *tecnobrega* are used without the permission of their owners and are thought to be a violation of applicable copyright laws (Omari 2010). Yet, while legally suspect, *tecnobrega* represents an example of "open business" —a business model that generates revenue with flexible or little IP protection (Mizukami and Lemos 2010: 31). Although its sound may be cheesy, as the name implies, large informal economies have emerged around tecnobrega's nonconventional distribution methods, which feature street vendors who produce and distribute CDs at minimal prices. These CDs are then used as advertisements for well-attended street parties through which both the vendors and producers reap profits from entrance fees and selling CDs. In places like Belem, tecnobrega is an economic force "employing thousands of people and moving millions of dollars every month" (Mizukami and

Lemos 2010: 36). As an example of *cultura livre*, the open business model supported by *tecnobrega* has provided social and economic opportunities for many of Brazil's underserved youth.

Recent social science scholarship also reveals Brazil's open-source tendencies. For example, in examining *cultura livre* and open intellectual property in Brazil, anthropologist Alexandra Lippman (2014) argues that Brazil has a reputation "for actively supporting alternatives to intellectual property and copyright law" (11). As evidence for this claim, Lippman relies in part on the open IP practices of two Brazilian musical genres: *funk carioca* and *tecnobrega*. Lippman claims that *funk carioca* —a thriving genre of funk music from Rio de Janeiro— musicians "cannibalize" IP by appropriating copyrighted music without securing the necessary licenses (2014: 14). Additionally, because open business models like tecnobrega do not rely on revenue from intellectual property rights, they are considered inspirations for nonproprietary, "open" methods of trade and commerce. While both funk carioca and *tecnobrega* do indeed thrive in the absence of IP enforcement, as Lippman (2014) suggests, it is important to note that the open production and distribution systems upon which these genres rely are "backed by social norms" (Mizukami and Lemos 2010: 43). Mizukami and Lemos (2010) posit that "the absence of players seeking effective enforcement of intellectual property rights and the absence of a strong copyright culture are the dominant factors of an environment in which a new, different cultural industry has been able to evolve" (2010: 45).

Meanwhile, in his study of the cultural practices of Rio's subaltern youth, George Yúdice (2003) offers a slightly different take on *funk carioca*. According to Yúdice, the subaltern youth of Rio's favelas use *funk carioca* therapeutically to cope with the racism and social exclusion they experience because of their lives in the favela. At the same time, Yúdice claims that corporate elites mobilize the cultural practices of these disenfranchised youth for private corporate gain, which brings greater hardships to these subaltern cultural producers. By advancing nontraditional business models that rely on "open" platforms, disadvantaged Brazilian youth employ digital technology to support themselves both financially and culturally in ways that were previously unforeseen.

As examples of *cultura livre*, both *tecnobrega* and *funk carioca* are innovative musical and cultural phenomena backed by social norms that rest outside the IP status quo. While some scholars debate the meaning of digital "openness" (Lippman and Murrell 2014) and its ability to be applied universally across various cultural settings (Fish 2014), genres like *funk carioca* and *tecnobrega* illustrate that the social norms backed by *cultura livre* have the potential to empower underprivileged youth by promoting cultural innovation through digital technology.

Free Culture and Net Neutrality in Juxtaposition

Although *cultura livre* and net neutrality are patently different subjects, the two concepts share some similarities. Like the values of net neutrality, which promote the public's interest in a free and open Internet over the private interests of

ISPs, the fundamental values of free culture promote the public's interest in open digital access over the private interests of IP enclosure. Moreover, while net neutrality is a "system of belief about innovation" (Wu 2003: 144), the social norms underlying the free culture movement promote technological innovation when adverse conditions call for adaptation to legal norms (Mizukami and Lemos 2010). I suggest that by juxtaposing the ideals of net neutrality with the values of free culture, we get a sense of the collaborative and networked potential of an Internet modeled in favor of the public good. Because of its recent *cultura livre* traditions (outlined below) and the net neutrality framework embodied in the Marco Civil, Brazil provides the appropriate locale to undertake this theoretical comparison.

Brazil's role in the free culture movement cannot be overstated. Sociologist Aaron Shaw's (2011) work shows how technocratic political support for open-source strategies took root within the progressive *Partido dos Trabalhadores* (The Workers' Party, or PT) during the presidency of Luiz Inácio Lula da Silva (known as Lula). Lula took office in 2003. Until the impeachment of his successor—former president Dilma Rouseff—in August 2016, the PT had controlled the Brazilian presidency since Lula's 2003 inauguration. Taking cues from James Holston's (2008) idea of "insurgent citizenship," Shaw argues that a group of "insurgent experts" —politically empowered technocrats who used government institutions to repoliticize tech policy in opposition to proprietary IP production— mobilized and were appointed to prominent government positions during Lula's first term in 2003 (2011: 256). With the help and support of PT leadership, these insurgent experts capitalized on their political appointments to promote and implement open-source ideologies throughout Brazil's institutional structures. Shaw posits that the governmental influence of the insurgent experts led to transformative open-source tech policies termed Free/Livre and Open Source Software (FLOSS), which contradicted Brazil's prevailing neoliberal doctrine. Shaw's historical case study can be used to show how *cultura livre* stems from FLOSS and the leftist political leanings of the insurgent experts, many of whom were radicalized in oppositional movements during Brazil's military dictatorship.

Further evidence of Brazil's FLOSS leanings is found in Juilian Dibbell's (2004) influential *Wired* magazine article that shows how the country gained an international reputation for advancing alternatives to IP norms. Dibbell argues that through its approach to drug patents, supporting the free software movement, and promoting its citizens' rights to a free and open Internet, Brazil was becoming an open-source nation— promoting free, universal access to the digital content controlled by IP rights holders. Dibbell sites two examples to support this claim. First, he recounts Brazil's successful challenge to pharmaceutical patents during Fernando Henrique Cardoso's presidency in the late 1990s. In an effort to curb its increasing rate of AIDS infection, Dibbell notes that Brazil guaranteed medication to all HIV carriers in the country. The prices charged for these patented drugs, however, made Brazil's plan unsustainable. Claiming the country faced a "national emergency," Brazil threatened to breach international patent laws and produce its own HIV drugs (Dibbell 2004). The patent holders in question— the US

pharmaceutical, Merck, and the Swiss firm, Roche —finally conceded and licensed the drugs at prices favorable to Brazil. This turn marked a significant victory for Brazil and was also the first time a developing nation had come close to violating a drug patent (Dibbell 2004). Secondly, Dibbell notes that Lula appointed Gilberto Gil as Brazil's Minister of Culture in 2003. Gil, an international music sensation and "insurgent expert" (Shaw 2011) himself, then expressed interest in establishing an Internet music repository, which might one day contain "every Brazilian song ever recorded, all downloadable for free" (Dibbell 2004).

These examples demonstrate how Brazil's PT party embraced open-source ideology, challenged international patent norms, and promoted open access to copyrighted music. Moreover, this recent history of support for *cultura livre* ideology under PT leadership shows that the democratic principles of openness, equality, and nondiscrimination —principles that are consistent with the ideology of net neutrality and the foundational values of the Internet— were established years before the MCI was enacted in 2014.

Dependência

Although *cultura livre* has the potential to further cultural innovation in marginalized communities, scholars have expressed concern that the lack of strong net neutrality regulation will inevitably hinder technological innovation in developing markets (Ramos 2014; van Schewick 2015; Marsden 2016). Because the Internet is, among other things, a platform that promotes competition between application

developers, creators of such applications must compete for the attention of end-users. As legal scholar Tim Wu notes, not only does a neutral network support "the emergence of the very best applications" (2003: 142), it also "ensure[s] the competition remains meritocratic" (2003: 146). Because *cultura livre* promotes cultural innovation among the disadvantaged, technological innovation is equally important in emerging markets where disadvantaged populations face numerous barriers to developing digital technologies. These populations often face steep financial hurdles, among others, and are no rival to foreign tech companies, like Facebook, that already command a substantial Brazilian market share (Ramos 2014).

Arguments for protecting net neutrality suggest a belief system about how innovation should work (Wu 2003). Recent legal scholarship argues that the focus on technological innovation policy is not without merit, but that the emphasis of such policymaking should shift towards more distributional principles that seek to mitigate socioeconomic disparities in Internet access and use (Sylvain 2016). Nevertheless, the idea that technological innovation, or the lack thereof, can exacerbate economic inequalities, reinforce social exclusion, and deepen the dependency cycles that bind poorer countries to advanced industrialized nations has gained a renewed salience in sociolegal scholarship (Vernego 2005; Ramos 2014; van Schewick 2015). This theory is not new and evolves from 1950s era dependency research that compared economic growth of advanced western societies to growth in poorer countries. Although there are competing notions of *dependencia*³⁵, Brazilian economist Theotonio Dos Santos (1971) defines the theory as a historical condition in "which the economy of a certain group of countries is conditioned by the development and expansion of another economy, to which their own is subjected" (226). Dependency therefore focuses on the underdevelopment of certain countries and how that underdevelopment is used to the benefit of dominant states. Because Facebook sponsors many zero rating plans in developing countries like Brazil, dependency theory provides a useful backdrop for understanding how tech initiatives from so-called "core countries" can impact technological development in the periphery.

Historically, dependency theory has sought to understand the relationship between the developed world —the advanced industrial societies of North America and Europe— and the underdeveloped regions of Asia, Africa, and Latin America. To that end, anthropologist Arturo Escobar's defining work *Encountering Development* (1995) helps us understand how post-World War II development discourse helped create extreme poverty in regions sometimes described as the "Third World." Escobar's work provides a history of post-WWII development in the Third

³⁵ While dependency is generally grounded in an international relationship between at least two states that have dominant/dependent interactions, scholars have debated the reasons that there is often persistent poverty in the poorer/dependent countries. Initially developed by United Nations economist Raul Prebisch, traditional ideas of dependency theory paid little attention to this question, except to note the need for modernization in poorer countries, which they thought would promote development and decrease poverty. Marxists Andre Gunder Frank, however, argues that poverty in dependent nations is the result of capitalist exploitation. Scholars who follow the world systems approach (Immanuel Wallerstein) suggest that poverty is directly related to an international political economy that favors wealthier nations while penalizing poorer nations.

World. Specifically, Escobar discusses how the discourse and strategy of development produced its antithesis: massive underdevelopment, impoverishment, exploitation, and oppression. According to Escobar, the "discovery" of mass poverty in the developing world created a development discourse that in turn produced a strategy to develop these impoverished regions and lift them out of their misery. The sad reality is that these development strategies, which were initiated in the United States and Western Europe, often left people in poorer conditions than they were in initially. Escobar's work suggests the importance of understanding the origins of any perceived need for development, which, he argues, are based on "European" constructs" emerging from the Western world (1995: 7). In contextualizing the post-WWII history of development, Escobar states that dependency can be deemed a chapter in the anthropology of modernity and can be viewed as a type of "imperial intervention that takes place at many levels-economic, political, military, and cultural" (1995: 15). Escobar's work provides an anthropological grounding of dependency theory and informs recent efforts that seek to understand digital technology's role in perpetuating dependency cycles.

While Escobar's analysis of dependency focuses much attention on the history and origins of the theory, contemporary dependency discourse often places an emphasis on the role digital technology plays in perpetuating dependency cycles. For instance, Vernengo (2005) argues that, in the developing world, the lack of technological progress is the primary deterrent to economic growth. According to Vernengo, this lack of economic growth in developing nations, which is fueled by an

inability "to develop an autonomous and dynamic process of technological innovation" (2005: 552), promotes dependency relationships between the center and the periphery. Meanwhile, in her analysis of net neutrality and zero rating, Barbara van Schewick (2015) warns of the adverse impact that these promotions have on technological development in Latin America. Van Schewick argues that Latin American ISPs typically zero-rate the top-ranked applications in a class (e.g., Whatsapp in a class of messaging applications), which reinforces the dominance of these top-ranked apps while making it more difficult for local developers to build market share. Finally, in his study of zero-rating plans in developing countries, Brazilian legal scholar Pedro Ramos (2014) argues that sponsored data promotions may appear advantageous for users of certain smartphone applications but may have the unintended effects of promoting market concentration, restricting local innovation, and reinforcing the economic dependency cycles that already bind many developing nations to their more advanced Western counterparts. Perhaps the biggest threat presented by zero-rating, however, is the long-term potential for a "walled garden" platform to create a two-tiered Internet, consisting of haves and have-nots. In this vein, Ramos suggests:

The gap between those who can pay for data caps and those who cannot afford them could lead to a two-tier internet: the "internet of the rich", or those who are wealthy enough to pay for the unlimited access; and the "internet of the poor", which would give access only to a few applications that would be affordable to poor people. This scenario could potentially raise social exclusion, as the existence of two different "internets" could distance the rich from the poor (with application providers creating services aimed from the rich and "light versions" aimed for the poor). Ultimately, it could lead to a replica of the social apartheid currently perceived in many developing countries, where slums have limited access (Ramos 2014: 14). A two-tiered Internet in Brazil would have a devastating impact on the country's current climate of social exclusion. As I note in the introduction to this dissertation, since 2003, the progressive policies of the *Partido dos Trabalhadores* (Worker's Party or PT) have helped mitigate the longstanding social and economic inequalities that culminated during Brazil's military dictatorship (1964-1985). Until the recent austerity measures implemented by current President Michel Temer, from 2003 through 2016 the liberal policies of Lula and Dilma (his successor) lifted an estimated 30 million Brazilians out of poverty (Scott 2018). While the term "digital divide" has recently fallen out of favor in anthropology³⁶ —with the phrases "digital inequality" or "digital inclusion" now considered more practical (Tacchi 2012)— the visceral divisions created by a two-tiered Internet would surely renew the usefulness of the term and exacerbate social inequality in Brazil.

Conclusion

This chapter employs the rhetorical question "Is Facebook the Internet" to explore net neutrality under Brazil's MCI. To do so, I bring the related topics of openness and free culture into conversation with net neutrality ideology to show not only the similarity between these discourses but also how these related ideologies are relevant to the open and inclusive ideals of the MCI. Whether for purposes of text

³⁶ Tacchi (2012) argues that a major problem with the term "digital divide" is that it assumes that, by closing the gap in digital access, digital technologies are beneficial to all citizens. Thus, the term is thought to merely reference access to digital technology without any consideration for its effective use (see also, Warschauer 2003).

messaging or maintaining a presence on social media, Brazilians rely on Facebook and Whatsapp to serve their social networking needs. Yet, the country's complete reliance on Facebook —and Whatsapp, which Facebook owns— undervalues the significance of the MCI, which is meant to promote both democracy and technological innovation in Brazil.

While the net neutrality provisions of the MCI aim to maintain a free and open Internet, promotions like zero-rating —which are often sponsored by Facebook— are corporate attempts that use virtual walls and closure to bring limited Internet access to disadvantaged populations in Brazil and other parts of the developing world. These promotions, which seek to seize new digital territory by bringing disconnected populations online, evoke memories of longstanding dependency cycles that have historically plagued the relationship between Latin America and the West.

CHAPTER FIVE

Conclusion

Throughout this dissertation, I examined the MCI's efforts to promote democratic Internet governance within the confines of a nation where citizenship rights are allocated in an unequal manner and democratic institutions are seemingly disjunctive. Moreover, I examined the importance of the MCI's net neutrality provisions, from both ideological and regulatory perspectives, to the democratic values of freedom of speech and association, which the MCI seeks to promote. While the MCI is relevant for issues of Internet governance at both national and transnational levels, my ethnographic field sites, the "global cities" (Sassen 2001) of São Paulo and, primarily, Rio de Janeiro, have a strong relationship to both global and local technological concerns and thus provided ideal locations to explore the research questions addressed herein. As I demonstrated, the MCI's grant of a "right to Internet access to all" includes those disadvantaged populations in Brazil that would most benefit from such a right. In Rio de Janeiro, access to the Internet and any corresponding digital rights are complicated by the social exclusion, marginality, and violence the city's disadvantaged populations experience.

At the institutional level, the framers of the MCI understood that Internet governance is a transnational discourse. While seeking to advance democracy within Brazil, they also recognized the potential for democratic Internet regulation to affect change throughout the world. Considering the national and international future of

Internet governance and its potential to have a strong effect on democracy worldwide, I conclude this dissertation by asking how beliefs about Internet governance in Brazil are related to broader, transnational conversations about global governance of the Internet. I draw on the work of Brazilian sociologist, Sérgio Amadeu da Silveira (2001) and his influential research on software livre (free software) and inclusão digital (digital inclusion). Silveira's work examines the relationship between the politics of digital inclusion and the free software movement. It is this nexus, he contends, that provides a fundamental link to advancing sustainable development, combating poverty, and fighting hegemonic globalization. Although the geographic focus of Silveira's work is Brazil, the substantive topics of his research (i.e., digital inclusion, free culture, and intellectual property) relate to transnational technological discourses and are therefore relevant across the globe. Moreover, because Silveira's work relates to both intellectual property and digital inclusion -- two topics regulated by MCI— his findings are pertinent to discourses of Internet governance. Given the disjunctions in Brazil's democracy and the doubts surrounding democratic inclusion in that country, I contend that the ideology of openness, which underlies the free software movement, various digital inclusion initiatives, and the democratic objectives of the MCI, is necessary to combat the marginalization and closure experienced by the masses both in Brazil and beyond.

National Political Climate and the Fate of the MCI

When I began my doctoral work in 2011, Brazil's economy was booming. Dilma Rousseff had just begun her first term as Brazil's president and was poised to continue the socioeconomic policies that had earned her predecessor and PT party mate, Lula, favor among the country's disenfranchised. Signs of optimism regarding the country's future were apparent on all fronts, with the most notable being the fervor surrounding Brazil's role as host of the 2014 World Cup and the 2016 Olympic Games. This energy resonated with me personally as scholars of Brazil and friends alike told me that this upswing made it an ideal time to conduct field research in Rio. This excitement about Brazil also resonated with my research interests. Although my research interests focus on Internet governance and the MCI, the urban development brought on by the World Cup and Olympics had technological components, as shown by the city government's attempt to brand Rio as a "smart city" (Enbysk 2013). I was completing course work at UC Santa Cruz in April 2014 when Dilma Rousseff signed the MCI into law. It was thus an exciting time to research the MCI in a country that was pioneering the movement for Internet governance.

The positive momentum that Brazil garnered since 2003, when Lula began the PT's 13-year reign at the helm of Brazilian government, continued through the course of my primary fieldwork in 2015, but the signs of slippage were apparent. One such indicator of this slippage is Brazil's economy, which began experiencing problems during my 2015 fieldwork. The US dollar has always held strong against Brazil's currency, the *real* (BRL). I used the exchange rate between the dollar and the BRL as

my own personal indicator of where things stood with Brazil's economy. When I arrived in Brazil in December 2014, the exchange rate was \$3 to R\$1. From the time of my arrival in December 2014 through August 2015, this rate of exchange remained fairly steady, fluctuating between \$3 to R\$1 and \$3.50 to R\$1. However, in September 2015, during the latter half of my yearlong primary fieldwork, the exchange rate reached \$4 to R\$1, the lowest value for the BRL since 2000 (Bouzanis 2015), before Lula took office.

As I detailed in the introduction to this dissertation, Internet governance is in many ways deeply political. Indeed, throughout my primary fieldwork in 2015 there was enormous political pressure on then-President Dilma Rousseff because of her alleged role in the *Petrobras* investigations. As this pressure was reaching its crescendo, the value of the BRL remained at a 15-year low through the end of my fieldwork in December 2015. Due to the culmination of these events, it is no surprise that shortly thereafter, in April 2016, the Brazilian Senate voted to impeach Dilma Rousseff; she was subsequently suspended from her role as Brazil's president in May 2016, while she stood trial for impeachment. At the conclusion of her impeachment trial, in August 2016, Dilma was found guilty of breaking Brazil's budgetary laws and formally removed from office. Consequently, Brazil experienced an "ideological flip-flop" when the democratic promise of the PT³⁷ was replaced by the center-right

³⁷ The "PT" refers to Brazil's liberal *O Partido dos Trabalhadores* (Worker's Party). I provide background and a brief history of the PT in the introduction of this dissertation.

administration of Michel Temer³⁸ who favors privatization and almost immediately began implementing harsh fiscal austerity measures, which made dramatic cuts to public health care, education funding, and government food programs (Watts 2016). Because of this recent ideological shift, the fate of the MCI remains uncertain. As of now, the legislation remains good law; however, it is unclear if Brazil's new administration³⁹ will have the political will to empower any regulatory body with a legitimate means to enforce the MCI's provisions.

An "Open" Brazil?

Although this dissertation reveals the problematic logic of advancing Internet civil rights in a country where democratic institutions are disjunctive, I conclude with my assertion that the MCI remains noble in its efforts to advance inclusion and openness. As I outlined in Chapter 4, openness has two aspects: ideological and legal/technical (Kelty 2005). In its attempt to advance an inclusive digital society, promote the right to Internet access, and protect net neutrality, the MCI furthers these dual characteristics of openness by advancing an Internet structure and ideology that facilitates the free circulation of ideas. I revisit the openness discourse here, with the ideology of Silveira (2001) in mind, because his work provides guidance on how initiatives that facilitate Internet access (e.g., digital inclusion strategies) and

³⁸ Michel Temer is a member of the Brazilian Democratic Movement Party (PMDB) and was Brazil's vice president during the presidency of Dilma Rousseff. At the conclusion of Dilma's impeachment trial in August 2016, Temer officially became president of Brazil.

³⁹ Brazilian presidential elections take place in October 2018, with the new administration taking office in January 2019.

openness (e.g., free software plans) can be the key to sustainable development in Brazil. According to Silveira, the funding from the multinational corporations that often finance Brazil's digital inclusion schemes should be harnessed to bring about more equitable distributions of wealth and power. For instance, Silveira suggests that using free software initiatives in Brazil's digital inclusion programs would reduce the royalty payments for licensing to many of those foreign companies. This reduction in royalty payments would in turn help stimulate Brazil's economy. Consistent with these policy suggestions, Silveira contends that the politics of digital inclusion in Brazil should break with its tradition of relying on funding from private multinational corporations.⁴⁰ Because combating digital and social exclusion is linked to advancing democracy and the deconcentration of economic power (Silveira 2001), implementing Silveira's policy suggestions would give force to the MCI's efforts to achieve Internet governance that furthers a more authentic Brazilian democracy.

A Transnational Open Future?

In the last few years the Internet has slowly transitioned from its open, global telecommunications roots to become an international network that facilitates corporate and state surveillance along with social control (Musiani, Cogburn and DeNardis 2016). In just one recent example of such surveillance and control, tech companies (e.g., Facebook) compile and exploit data from billions of people across

⁴⁰ For examples of this tradition, see Chapter 3 where I discuss the Brazilian government's partnering with (1) Facebook to fund digital inclusion initiatives in São Paulo and (2) Cicso to finance the *Naves do Conhecimento* in Rio.

the globe. Meanwhile, these same tech companies are vulnerable to security breaches as shown when the consulting firm Cambridge Analytica harvested the personal information of millions of Facebook users, which it allegedly used to manipulate presidential elections in the US (Menand 2018) and Brazil (Brito 2018). Examples such as these run counter to the traditional narrative of the Internet as a transformative platform that offers the possibility of a decentralized, egalitarian, and free digital society (Turner 2006). Moreover, the current state of surveillance and control that exists in the online realm also runs counter to the open ideals upon which the Internet was founded. It appears, then, that there is an inherent tension between the Internet's traditional principles of openness and freedom and the more recent trend towards Internet surveillance and control. Because the MCI was established on principles of openness, as I outline in Chapter 3, and has strong corporate data protection provisions, it provides an ideal model of how governments can maintain the integrity of the Web and police the large tech companies that dominant the digital landscape.

Em Fim

This dissertation contends that the MCI's idealized future of democratic Internet governance cannot exist in Brazil's disjunctive democracy. Still, the MCI provides valuable legislative guidelines for advancing online democracy in the digital era. To support these claims, Chapter One (the introduction) provides the political and historical background of the MCI and situates this Internet law within the theoretical frameworks of citizenship and democracy that drive this dissertation. Chapter Two

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discusses the geographic terrain of Rio and how the city is divided along racial and class lines according to this terrain. Proponents of digital inclusion suggest that digital technology can disrupt these geographic divides and promote a more inclusive society. However, as Chapter Two demonstrates, because the social networks of Rio's rich and poor do not overlap, the city's racial and class divides extend to the online realm. Chapter Three's ethnographic examination of how the right of Internet access unfolds in *Complexo da Maré* reveals that such a right is often tied to various sociopolitical realities and risks in Rio's urban favelas. These risks index broader disjunctions in contemporary Brazilian democracy. Finally, in Chapter Four, I explore the net neutrality provisions of the MCI and theoretically compare the values of net neutrality with the ideals of *cultura livre*. Through this comparison, I argue, we get a sense of the collaborative and networked potential of the Internet modeled for the public good.

While the MCI focuses on access to the Internet through digital inclusion, I introduce Silveira's *cultura livre* (free culture) proposal into the Internet governance discussion because it provides another practical means of advancing the Web in ways that serve the public good. As I demonstrate in Chapter Four, the values of *cultural livre* are consistent with the ideological and regulatory components of openness, which is championed by the MCI. Indeed, contrary to traditional media, the interactive, digital capacities of the Internet depend on a global network of computers that remains open and collaborative (Silveira 2001). Through its progressive digital guidelines, the MCI has begun the conversation. Openness in the digital ream coupled

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with the requisite social and cultural transformations can reshape democracy in Brazil and beyond.

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