NETWORKING DEMOCRACY:
BRAZILIAN INTERNET FREEDOM ACTIVISM
AND THE INFLUENCE OF PARTICIPATORY DEMOCRACY

By

Daniel Patrick O'Maley

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Approved:

Lesley Gill, Ph.D.
Beth Conklin, Ph.D.
Marshall Eakin, Ph.D.
John Janusek, Ph.D.

To my mother,
who first showed me the world,
and who inspired me to make it a better place.

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CHAPTER 1

INTRODUCTION

Brazilian Internet freedom activists are on the front lines of an escalating global effort to preserve the Internet as a democratic, public space for creative and civic engagement. They are fighting attempts worldwide to restrict, censor, and monitor Internet access in the name of state security or for commercial purposes. In this dissertation, I examine the pioneering tactics activists in Brazil have used to defend what they refer to as the *Internet livre* – a free and open Internet.

Internet freedom activists worldwide currently consider Brazil a global reference point for an open and democratic Internet policy. Indeed, in his December 2013 "Open Letter to the People of Brazil" in which he asked for political asylum, Edward Snowden hailed Brazil as one of the countries that was most concerned with Internet freedom and the future of the global computer network (2013). Interestingly enough, this is in spite of the fact that the Internet arrived relatively late to Brazil in 1992 and that the global network currently relies very little on Brazilian technology and infrastructure in order to function. Additionally, while access to high-speed, broadband Internet access is growing, it is still expensive and beyond reach to large sectors of the population. This immediately raises a number of important questions. Why has Brazil become a global leader in developing Internet policy? What lessons might activists in other places learn from their Brazilian counterparts? And how might an increasing Brazilian presence in setting global policies shape the future of the global Internet?

I argue that the practices, values, and goals of Internet freedom activists in Brazil have been uniquely influenced by the country's redemocratization process over the past 30 years. In particular I show how understandings about democracy that were forged among social movements and labor union groups working in the 1970s and 1980s to end the military dictatorship (1964-1985) are now being applied to Internet policy and governance. In particular, I highlight how the ideology of participatory democracy – a form of democracy that strives to broaden opportunities for citizens to make meaningful contributions in policy decisions beyond public elections – has informed Internet freedom activism. According to its proponents, participatory democracy seeks to radically transform the political system and challenge elite control of the state by empowering previously marginalized groups to actively participate in governance decisions (Avritzer 2009; Santos and Avritzer 2007). In Brazil participatory democracy is most closely associated with the *Partido dos Trabalhadores* (PT), the Worker's Party, and left-wing social movements closely aligned with it. The most well known example of participatory democracy is *orçamento participativo* (participatory budgeting), in which neighborhood councils in primarily poor regions are given power to decide how to allocate municipal funds in their communities. In this way, mechanisms of participatory democracy, such as participatory budgeting, differ from forms of liberal democracy in which periodic elections are considered the primary mechanism of citizen participation in determining state policy. Portuguese sociologist Boaventura de Sousa Santos and Brazilian political scientist Leonardo Avritzer argue that liberal, representative

democracy – what they consider the "hegemonic" form of democracy since the second half of the twentieth century – actually restricts both individual and collective participation so as to prevent "democratic overload" that might jeopardize elite prioritization of capital accumulation over social redistribution (2007:li). They contend that the principle of one person one vote, which elides economic and social distinctions, along with the bureaucratization of the state apparatus in the Global North have led to a situation in which populations are largely disempowered to set the political agenda. Instead, elite classes supporting capitalist expansion have co-opted the democratic system to perpetuate accumulation under the guise of popular authorization. Thus, the spread of liberal democracy in the past 30 years is one element of neoliberal globalization. For Santos and Avritzer, experiments with forms of participatory democracy in Brazil and in other places in the Global South in the 21st century represent counter-hegemonic efforts to "democratize democracy" in hopes of addressing social inequalities exacerbated by neoliberal globalization.

In this dissertation, I illustrate how notions of participatory democracy have shaped the practices of Brazilian Internet freedom activists. In Brazil many of the same political activists, union organizers, academics, liberation theology activists, and artists who worked to end the military dictatorship have found common cause in promoting Internet freedom. They are joined by a younger generation of activists whose memory of the dictatorship is either tenuous or non-existent, but who have embraced ideas of participatory democracy as a way to address issues of social justice and inequality. The emphasis on increasing citizen participation in democratic governance to radically challenge elite control of the state is now being applied to Internet policy and governance. This takes the form of innovating new online, digital platforms to collectively define national Internet policy as well as restructuring existing institutions like the Brazilian Internet Steering Committee to create new channels for citizen participation in policymaking. In this dissertation, I also draw attention to the potential limitations of such efforts. As my work demonstrates, mechanisms of participatory democracy have not always delivered the radical change that proponents hope to realize. This is often due to pushback from elite sectors and corporate interests unwilling to cede power to other groups. Thus, my ethnographic analysis exposes both the power of the rhetoric of participatory democracy and its limitations in terms of fundamentally challenging the dominant capitalist political economy. Indeed, in many instances Brazilian Internet freedom activists have had to turn to more traditional social movement tactics to advocate for political change. In light of this reality, I raise questions about the extent to which recent activist victories may be replicated on a larger, global scale.

One of the central arguments of this dissertation is that the Internet has never been a fixed technology, but is rather a global computer network that is constantly in flux as new technologies are incorporated and individuals and groups use it for new and different purposes. Throughout this dissertation, I demonstrate how the socio-technical configuration of the Internet is embedded within the larger relationships of power and inequity. Brazilian activists refer to the specific configuration of the Internet that they are championing as an *Internet livre* – a free Internet. By free they do not mean free of charge, although many do believe that access to the Internet is a human right and that it should be made available to all

at no cost. Rather in this case *livre*, or free, refers to freedom.[1] In a collectively written manifesto published in October 2013, a group of activists articulated their vision of an *Internet livre*. What is apparent in this manifesto is how their conception of freedom contrasts with dominant neoliberal ideas about the superiority of the private sector to distribute resources and structure social life. This, in turn, influences their view of how the Internet should be configured and what values should underpin its operation:

> The Internet is under attack. We are witnessing a battle between those who conceive of [the Internet] as only a lucrative business model and those who defend it as a precious network for creative collaboration, freedom of expression, social mobilization, and the strengthening of diverse fundamental rights like the rights to communication, culture, and access to knowledge (*Grupo Marco Civil Já* 2013).

Evident in this statement is the way activists envision the Internet as a technological platform that possesses the potential to facilitate collective social mobilization and change. In Brazil a heterogeneous network of computer programmers, academics, labor union organizers, artists, consumer advocates, politicians, journalists, lawyers, and digital entrepreneurs are working to promote an *Internet livre*. These are the individuals whom I refer to as Internet freedom activists and whose backgrounds and tactics I analyze throughout the course of this dissertation.

At present, the three most pressing policy concerns for Brazilian Internet freedom activists are maintaining user privacy, preserving freedom of expression by combatting restrictive intellectual property policies, and defending net neutrality – a technical principle that holds that the flow of information should not be restricted or fast-tracked based on content, user, site or application type. These issues are not unique to Brazil. They are the same as those currently being debated in the US, Europe, and elsewhere (MacKinnon 2013). Enacting policies and technologies that preserve these core values are central to the goals of activists. In this sense, Internet freedom activists are working to promote a specific vision of the Internet and how it should operate. For them, the Internet is a fertile space for knowledge sharing and democratic participation. Thus, threats to this type of Internet are seen as threats to freedom itself.

In contrast, state security agencies and multinational corporations are working to shape an Internet in which it is easier to monitor and control the flow of data. For security agencies, increased control facilitates surveillance of individuals in order to identify potential threats (Greenwald 2014). For corporations, filtering data and restricting access to content creates new opportunities for profit. For example, telecommunications corporations would like to create Internet "fastlanes" for commercial content for which they could charge a

[1] Activists have adopted the term *livre* as it is employed by the free and open source software (FOSS) movement in Brazil. In Portuguese, FOSS is almost universally referred to as *software livre* as opposed to the more corporate-friendly alternative *codigo-aberto*, open source. Brazilian sociologist Rafael Evangelista argues that this semantic choice evidences a more radical technological agenda focused on social justice and sustainable development (2010). By linguistically referencing the FOSS movement, Internet freedom activists are drawing connections to emphasize how their vision of the Internet embraces values of widespread access, collaboration, freedom of expression, and resistance to corporate expropriation of knowledge that are central to the Brazilian FOSS movement. The connections between FOSS (*software livre*) and a free Internet (*Internet livre*) will be expanded on in Chapter 2.

premium to both customers and content providers alike. Corporations are also interested in tracking user behavior in order to develop large databases of user preferences that can then be used to determine target audiences for their products and services (MacKinnon 2013; Pariser 2012). Importantly, the power of both security agencies and corporations has increased significantly in the past decades, and without any type of democratic oversight. Neoliberal, free-market policies implemented since the 1980s have intensified the influence of private corporations in structuring social life. This development is particularly apparent in the telecommunications sector, which was a target of privatization efforts by private capital in the 1980s and 1990s since in most countries the telecommunications sector had been publicly owned (Harvey 2005). Likewise, the global "war on terror" initiated in the wake of the attacks on September 11, 2001, in the US has entailed an exponential growth in "signals intelligence" (SIGNIT) surveillance to monitor global communications networks (Greenwald 2014). The revelations in June 2013 about US National Security Agency (NSA) mass Internet and telecommunications surveillance exposed by leaks of Booz Allen Hamilton systems analyst and former CIA operative Edward Snowden demonstrated how state security agencies and corporations have been colluding to monitor individuals using increasingly ubiquitous digital technologies. Thus the forces that threaten activists' visions of a free Internet are growing in strength.

American journalist Rebecca MacKinnon, one of the leading chroniclers of the emergent global Internet freedom movement, argues that individual Internet users have little influence over how the Internet is configured and thus the Internet functions without the "consent of the networked" (2013). In using this phrasing, she invokes Thomas Jefferson's paean to popular sovereignty in the US Declaration of Independence in which he asserted that governments derive "their just powers from the consent of the governed." This principle, which was highly influenced by the political theories of Locke and Rousseau, has been the moral rationale for liberal, democratic forms of government since the 1700s. MacKinnon contends that at present, Internet users have an extremely limited ability to influence Internet policy. This pertains both to corporate terms-of-service policies that govern large, transnational corporate-owned websites (e.g., Google, Facebook, etc.) as well as the laws and regulations of nation-states that affect Internet use. For MacKinnon the key to resolving the lack of consent and to defending Internet freedom is to increase public awareness about Internet issues and to increase democratic participation. "People need to stop thinking of themselves as passive 'users' and 'customers,' and start acting like citizens of the Internet—as 'netizens'" (MacKinnon 2013). One of the primary ways she suggests people do this in countries with democratic systems is by making their voices heard at the ballot box by electing representatives attentive to issues of Internet freedom. Voting is the quintessential way to effect change within the liberal democratic system. In her opinion, the nascent Internet freedom movement should follow in the footsteps of the environmental movement in the US and Europe, which she argued scored victories after electing sympathetic politicians to national legislatures.

In contrast, American media scholar Robert W. McChesney argues in his book *Digital Disconnect* that the current threats to the Internet stem primarily from the dominant capitalist system in which the interests of private capital dominate society and thus, in turn, the entire political system (2013). Elaborating on a fundamentally Marxist critique of liberal democracy, he asserts that the inequality that the capitalist logic of accumulation produces in society "promotes a thoroughgoing corruption of the governing process as wealthy special

interests come to dominate, forcing the system to maintain and even increase their privileges" (McChesney 2013:14). Thus, in his estimation, fundamentally addressing the threats to the Internet cannot be successfully accomplished from within the current neoliberal political economic framework given the unequal distribution of power it perpetuates. The only way to protect the Internet is to develop a more broad-based political movement motivated by a progressive agenda that challenges the role of private corporations in society and addresses income and power inequalities in a comprehensive fashion. In this way, "The democratization of the Internet is integrally related to the democratization of the political economy" (McChesney 2013:22). Ultimately, he contends that only a more radical reorganization of power within society will result in positive outcomes for the future of the Internet.

Brazilian Internet freedom activists have championed democratic participation as a way to defend Internet freedom. However, their vision of democratic participation goes beyond the liberal model endorsed by MacKinnon. Brazilian activists' emphasis on employing mechanisms of participatory democracy demonstrates a goal of not just wanting to gain the "consent of the networked," but also a desire to encourage the networked to become actively involved in determining the ways in which they are networked. Thus, they are hewing to a more radical approach endorsed by McChesney that potentially generates solidarity and directly contests increasing corporate control over the global information network. From this perspective, the push by Brazilian activists to radically democratize Internet policy through participatory democracy ultimately challenges the underlying logic of liberal democracy, which is linked with corporate-led neoliberal globalization. In this way, participatory democracy is a tactic through which Brazilian activists are contesting both neoliberal commercialization of the Internet and the construction of state surveillance apparatuses that employ the telecommunications infrastructure.

The influences of the redemocratization process on Brazilian Internet freedom activism have made it particularly unique in two important regards. First, Brazilian activists have pressured the state to guarantee the rights of Internet users. The most high-profile example of this is the *Marco Civil da Internet* – the Civil Rights Framework of the Internet – an Internet rights bill that has been hailed by Internet freedom activists worldwide. This is a novel approach for Internet freedom activists worldwide who in the past perceived of states as threats to a free Internet and frequently argued against state intervention in Internet policy. Second, Brazilian activists have championed new forms of citizen participation in shaping Internet policy and governance. This is evidenced by the collaborative fashion in which the text of *Marco Civil da Internet* was written as well as by new channels for citizen input built into the Brazilian Internet Steering Committee's structure. Ultimately, the Brazilian case demonstrates how an increased understanding of the role of states in governing the Internet along with a belief in new forms of increased citizen participation may reshape global Internet policy.

Brazilian Internet Freedom Activists

The network of Internet freedom activists in Brazil is heterogeneous and decentralized. This means that there is not one, central organization or leader that coordinates activist activities and objectives. Instead, likeminded individuals from a number of organizations and backgrounds are finding common cause to collaborate on efforts to shape Internet policy and governance. On the whole, these activists are largely urban, middle-class,

and well educated. Many, if not most, are politically active and have participated in progressive social movements or other activist mobilizations. Their concern with Internet policy is related to their own use of the technology and the role they see it playing in contemporary life. I have broadly classified Brazilian Internet freedom activists into the following four clusters for analytical purposes.

Free and Open Source Software (FOSS) Militants

The highly active and politically organized Brazilian free and open source software (FOSS) militants have been central to mobilizing in favor of Internet freedom. As I discuss in Chapter 2, the critique of proprietary software central to the FOSS movement became entwined with left-wing, anti-neoliberal politics in Brazil. Promoting FOSS became understood as a technological component of a larger political project to create a more egalitarian society. Indeed, some of the most important FOSS militants are also longtime members of the PT. For these individuals, the preservation of an *Internet livre* serves the same ends as *software livre* – the Portuguese term for FOSS. During the course of this dissertation, I will highlight the role of leading FOSS militants like Sergio Amadeu, Marcelo Branco, and Mario Teza who helped start the FOSS movement in Brazil and have also been some of the most vocal proponents of Internet freedom.

Media Democratization Activists

As the Internet has come to be an ever more important platform for accessing all sorts of news and media (newspapers, television, film, radio, etc.), individuals concerned with the corrosive effects of corporate media control have come to see the Internet as a way to bypass the centralizing control of corporations. For these media activists, the decentralized nature of the network creates space for a diversity of opinions and perspectives that are not always tolerated by large media conglomerates, like Brazil's Globo, Grupo Folha, and Grupo Abril. In turn, media companies increasingly understand the Internet as part of their business model and are seeking to create policies that restrict the flow of information (e.g., severe copyright enforcement measures). Thus, journalists Pedro Ekman and Bia Barbosa, who work with the NGO *Intervozes* in São Paulo, see defending Internet freedom as part of a larger project to "*democratizar a mídia"* – to democratize the media. By this they mean increasing the ability of individuals and groups both to access information and to have their views represented. For these individuals, discussions about Internet policy are part of larger debates about how society, and in particular the media, should be organized.

Progressive Legal Scholars

A community of progressive lawyers has been central to framing the debate about Internet freedom in terms of a discourse on rights and to shaping legal code in a way that preserves Internet freedom. In many cases they became interested in Internet policy through their exposure to the free and open source movement and its critique of the current global copyright regime. It was Ronaldo Lemos, a legal scholar from Rio de Janeiro and the director of Brazil's Creative Commons initiative, who first suggested creating an Internet rights law in 2007. Young lawyers Pedro Abramovay, Guilherme Almeida, and Paulo Rená then worked in the Ministry of Justice to help draft the text of the law. For these lawyers, developing a legal code that facilitates using technology to increase access to information is imperative for helping to build a more egalitarian, democratic society.

Science and Technology Researchers

Professors, particularly from computer science, physics, engineering, and other STEM fields, have been central to the development of the Internet in Brazil. Accessing the data processing power of foreign research centers and collaborating electronically with international colleagues proved to be extremely beneficial to their own research, and because of this some of the first connections to the global computer network in Brazil were created by Brazilian academics at federal and state universities. The continuing legacy of the academic community in helping to build out the Internet in the 1990s is evidenced by the prominent role of academics at the Brazilian Internet Steering Committee, including the Executive Secretary, physicist Hartmut Glaser, and emeritus board member and engineer, Demi Getschko. These researchers were some of Brazil's Internet pioneers and thus feel a responsibility to protect the computer network that they were so instrumental in creating.

These four clusters of Internet freedom activists are not mutually exclusive, but rather represent analytical categories. Indeed, a number of activists I met could easily be categorized in more than one of these groups. Nonetheless, identifying these groups helps paint a picture of the background and motivations of Brazilian Internet freedom activists.

The Anthropology of Democracy

This dissertation belongs to a growing body of research in the field of political anthropology, which critically interrogates the political ideal of democracy and the enactment of democratic institutions worldwide (Paley 2002). Ever since the colonial period when the field of anthropology was in its nascent days, anthropologists have been concerned with analyzing the structure and organization of power within societies (Radcliffe-Brown 1950). Often, the knowledge generated from this research, on what were predominantly non-Western groups, was used to abet the colonial governance project (Johnson 1982). More recently, however, political anthropologists have shifted their gaze to Western political models and institutions, such as democracy, which have traditionally been the purview of the field of political science. The anthropological interest in studying democracy as a political ideal grew in the early 1990s in the wake of the end of the Cold War as the seeming defeat of socialism as a political system and a utopian ideal led to a widely acclaimed capitalist triumphalism that linked democracy to free market, neoliberal economics. Anthropologists, noted, however, that there was a simultaneous disillusionment among many about the way diverse arrangements of democratic institutions worldwide were functioning and how social, political and economic conditions of inequality persisted (Paley 2002:473). Thus, unpacking the meanings and practices of democracy globally became a new subject of anthropological research.

Anthropologists' use of ethnographic research methods, which often depend on relationships with people outside formal political institutions, as well as their attention to alternative worldviews have permitted them to look beyond official discourses about how democracy operates in theory. Thus, cultural anthropologists have paid attention to how democratic systems function in day-to-day life, their local meanings, and who they benefit in practice. In this way ethnographic exploration of democratic processes has raised important

new questions about what the term democracy means in a particular context, who is using it, and to what ends. As Julia Paley notes, "discourses labeling certain regimes as democracies are strategically deployed by groups with strong interests in particular definitions and contested by others differently situated in relations of power" (Paley 2002:471). The role of the anthropologist is then to reveal these underlying power structures and to examine how changing political regimes represent shifting power.

The term "democracy" is oftentimes a floating signifier that can be filled with any number of given meanings, sometimes even contradictory ones. This is particularly true in societies, such as Brazil, that have undergone the so-called transition from authoritarian military rule to civilian control. In her work on post-Franco Spain, Begonia Aretxaga noted what she called the "fetishization of democracy," in which the promise of a new, modern European democratic political system obscured the traces that connected the Socialist government elected in 1982 to the former regime in the form of the Francoist military and administrative bureaucracies that were left largely intact. This fetishization of the new Spanish democracy was ultimately the legitimizing discourse that allowed the Spanish government to continue policies of state terror against Basque nationalists (2000:64). In the Brazilian context, James Holston and Teresa Caldeira have labeled the persistence of the gap between what is promised in democracy and what is actually experienced by individuals as "disjunctive democracy" (1998). By this, they refer to the uneven enactment of citizenship rights based on race, gender, social class, and other social differences that persist even in a regime where, theoretically at least, all citizens are equal before the law. These distinctions are the legacy of long-term power inequalities in Brazilian society that are the legacy of the colonial project. They argue that this disjuncture is why even though forms of democratic governance have taken root in Brazil, they have also resulted in new forms of violence, corruption, and impunity that make Brazilians feel more threatened by everyday violence than they were by the repressive military regime. The paradoxical characteristics of democracy in so-called post-transition societies expose how democracy can be fetishized in ways that obscure or even exacerbate long-standing inequality depending on the way in which it is enacted.

The meanings given to the term democracy suggest that it is not a single condition that societies do or do not have, but rather a set of processes unevenly enacted by different groups over time in different contexts. In this dissertation, I examine how Brazilian Internet freedom activists are calling upon specific conceptions of democracy, in particular participatory democracy, in order to promote more socially equitable Internet policy. Yet, as Julia Paley points out, invoking democracy in order to obtain their policy objectives is not without risk, particularly given the capaciousness of the term and its multiple, contested meanings:

> Social movements' invoking of democracy discourse may be a tactical move, a carefully selected appropriation of dominant logics, or a less reflective reproduction of dominant tropes; in a particular context it may also be a risky choice, one that plays into and legitimates a Cold War discourse of democracy and its opponents, or a post-Cold War imaginary linking political freedom to liberated market forces (Paley 2002:486).

Ultimately, my anthropological analysis of the meanings of democracy in Brazil and the way

that Brazilian Internet freedom activists are employing the term necessarily pays attention to broader historical trends and the shifting power relationships in Brazilian society over the past 30 years.

Interrogating Participation: Critical Perspectives on Participatory Democracy

The central argument of this dissertation is that initiatives by Brazilian Internet freedom activists to democratize Internet policy are characterized by an emphasis on participatory democracy. Activist initiatives to create an Internet freedom bill through an online, interactive website as well as new channels of citizen participation in the Brazilian Internet Steering Committee represent contemporary applications of participatory democracy theory applied to developing Internet policy. While some social scientists studying the Brazilian context have understood participatory democracy as a novel democratic approach toward a more redistributive social model that challenges neoliberal policy objectives (Baiocchi 2005; Nylen 2003; Santos and Avritzer 2007; Santos 1998), others have noted how the rhetoric of participatory democracy is, in fact, compatible with the neoliberal political economy (Dagnino 2007; Junge 2012). As I analyze the application of theories of participatory democracy to developing Internet policy in Brazil in this dissertation, I examine contested notions about democracy and seek to understand whether this strategy can potentially lead to radical change in the way that power is distributed within society.

For advocates of participatory democracy such as Santos and Avritzer, it represents a counter-hegemonic move to broaden understandings of democratic participation and to effectively "democratize democracy" by increasing popular participation, especially among traditionally marginalized groups (2007:lxii). In this way it stands in contrast to liberal, representative democracy as practiced in the Global North, which tends to be low-intensity and which has been successfully coopted by powerful corporate forces through intense lobbying of politicians and the financing of political campaigns.[2] The ability of corporations to exert influence in liberal democracies has made it virtually a condition of neoliberal globalization (Santos and Avritzer 2007:lxv). Indeed, the implementation of a liberal democratic system in Brazil was part of a larger wave of democratization in Latin America in the late 1970s and 1980s. What political scientists have called the "third wave" of democratization in the 1980s and 1990s paralleled the enactment of neoliberal policies in the region. These economic liberalization policies implemented across Latin America, commonly referred to as the Washington Consensus, resulted in the shrinking of social welfare programs, the privatization of public resources, the lowering of trade barriers, and the establishment of flexible labor policies that reduced labor union power (Harvey 2005). Santos and Avritzer contend that liberal democracy serves the neoliberal project by giving it the veneer of popular approval (2007). For these scholars, mechanisms of participatory democracy are a possible solution to the "crisis of representation" in which citizens are participating less in mechanisms of liberal democracy (i.e., lower voter turnout) and are feeling less and less represented by their elected officials. Implicit in their belief in

[2] In the US, the power of corporations in political life has expanded recently in wake of the Supreme Court's 2010 ruling in the case of Citizen's United v. Federal Elections Commission, in which the conservative majority found that the First Amendment of the US Constitution prohibits the government from restricting political expenditures toward direct advocacy by corporations, labor unions, and other associations. This ruling overturned existing federal law that restricted such advocacy during election season. It has resulted in increased political spending by corporations and wealthy individuals.

participatory democracy is the notion that more popular participation in political decision-making will result in more progressive social policy, which in turn will lead to a more egalitarian distribution of wealth. For them, participatory democracy will result in governance decisions that more closely align with the interests of the masses rather than those of the elite and of private capital.

Conversely, others have critiqued the overly utopian outlook of proponents of participatory democracy and noted how, in practice, the concept of participation has been coopted by proponents of neoliberal development to signify market-oriented, individualistic forms of social interaction (Dagnino 2007; Junge 2012). For example, Brazilian political scientist Evelina Dagnino has drawn attention to what she calls a "perverse confluence" between the rhetoric of participatory democracy and neoliberalism:

> The perverse nature of the confluence between the participatory and the neoliberal projects lies in the fact that both not only require a vibrant and proactive civil society, but also share several core notions, such as *citizenship, participation,* and *civil society,* albeit used with very different meanings. The common vocabulary and shared institutional mechanisms obscure fundamental distinctions and divergences. The apparent homogeneity conceals conflict and contradictions by displacing dissonant meanings (Dagnino 2007:548).

In her estimation, the notions about democratic participation and citizenship that emerged among social movements during the 1970s and 1980s were primarily about demands for social inclusion of the working class and a more egalitarian sociability. It was a productive vernacular that allowed a diverse set of movements (workers, women, blacks, gays, environmentalists, etc.) to generate solidarity in an effort to contest the traditional social hierarchy in which they had little power (Dagnino 2007:552). It is important to point out that the rhetoric of participatory democracy did not contain any class component, as did earlier socialist and communist ideologies. This meant that there was no explicit prioritization of the participation of the working class in decision-making, even though the participation of workers was one of its proponents' implicit goals. In turn, the concept of participatory democracy has been more easily resignified by proponents of neoliberalism in such a way that participation is conceived of as a process through which individuals become further integrated into the market system. The notion of collective solidarity that originally underpinned the participatory project has been substituted by one that focuses on individuals and which therefore erodes "the sense of public responsibility and public interest that had been so hard-won in the democratising struggles of Brazil's recent past" (Dagnino 2007:554). Ultimately, Dagnino criticized the PT because it continued to employ the rhetoric of participatory democracy while simultaneously advancing some components of the neoliberal project that it originally opposed.

Central to critiques of participatory democracy are questions about what constitutes participation and who is actually allowed to participate in a meaningful way. Indeed, government institutions increasingly ask for participation in "civil society," a vague category in which distinctions of power (race, class, gender, etc.) are not explicitly addressed. Even when such differences are acknowledged by governments, as is the case with racial minority/indigenous cultural rights policies that anthropologist Charles Hale refers to as "multicultural neoliberalism," the potential power of these supposedly empowered groups to

contest the status quo is so delimited that it essentially poses no real challenge to the overall neoliberal governance project (Hale 2005:13). In fact, participation may be limited to sectors of society whose behavior is supported by the government, what some have called the "five-star civil society" (Dagnino 2007:554), or what Hale has referred to in the case of multicultural politics as the "*indio permitido*", or "authorized Indian" (2004:17). While popular participation was initially perceived as a radical path to challenge dominant power structures of neoliberal capitalism by incorporating the working class and other marginalized groups, participation is no longer seen as a threat to the status quo. Indeed, participation has become a "politically attractive slogan" worldwide, and it has even been coopted by non-democratic repressive regimes (Rahnema 2010:129–131). Ultimately, the call to participation in democratic governance is rhetorically attractive, but what that means in practice may be much less radical than what was originally envisioned by proponents of participatory democracy. Whether participatory democracy merely tames capitalism around the edges or can lead to a more radical redistribution of power within society is at the core of debates about its efficacy as a political tactic to effect change.

Reenvisioning the State and Democracy: The Brazilian Redemocratization Process and the Emergence of Participatory Democracy

I contend that the source of current ideas about democratizing Internet policy and governance can be traced to anti-dictatorship activism in the late 1970s and early 1980s when there was an effervescence of new democratic ideals and practices that coalesced among movements that were working to end the military dictatorship that had been in power since 1964. Some of the strongest pro-democracy efforts to end the dictatorship emanated from the urban peripheries and were the result of the spread of practices of liberation theology and labor union organizing (Holston 2009:235–247). These often overlapping movements created new forms of social mobilization that engaged individuals and asked them to be more active participants in making demands upon the state to address social inequality. The claim to "rights" and "social inclusion" specifically as "citizens" that was emanating from the poor and working classes represented a radical departure from traditional Brazilian social organization since the colonial era (Baiocchi 2005; Holston 2009; Keck 1986).

The demands for social inclusion and citizen participation were channeled primarily through the PT, which was founded in 1980 once the dictatorship authorized the formation of opposition political parties. While union members, including their young charismatic leader Lula da Silva, dominated the party, its grassroots base was quite heterogeneous and included middle class intellectuals, "new" working class sectors (bank workers, teachers, etc.), activists from traditional neighborhood movements, and members of "new" social movements (women, people of color, environmentalists, and homosexuals). The party envisioned itself as one where "'social movements can speak,' with an emphasis on internal democracy and openness, rejecting democratic centralism and vanguardist positions, and aligning class struggle with citizenship" (Baiocchi 2005:11). The military dictatorship had brutally repressed and outlawed Marxist political movements but tolerated the PT, which was never officially Marxist and avoided using overtly communist rhetoric so as to avoid also being crushed by the military regime. Thus, the PT grew in strength as a political party that voiced the demands of the working class in a political environment in which explicitly critiquing the capitalist political economy could land one in jail.

Violent repression by the military dictatorship decimated Marxist political parties, which were officially outlawed in Brazil until 1979.[3] This that the PT necessarily generated new forms of left-wing political organizing. In particular, new union deliberation practices referred to as *novo sindicalismo* (new unionism) that emerged in Brazil in the 1970s served as the template. *Novo sindicalismo* rejected previous corporatist, state-directed unions and instead encouraged the rank and file to help determine union priorities. Thus, within the PT members were organized into local committees that then met at conventions where party policy was hashed out. This bottom-up, grassroots system represented a radical departure from traditional Brazilian political parties, including communist and socialist parties that maintained vanguardist, top-down organizational hierarchies and which were often led by individuals from the middle and upper classes (Abers 1996). In contrast, the PT believed that politics was not "merely an elite activity exercised in Congress and in organs of the state but involved all kinds of popular struggles" (Keck 1986:87–86). Many of its leaders came from the working class. This strengthened the party's ties to grassroots social movements and it empowered individuals to have the ability to influence the immediate decisions that affected their communities. Thus, the PT pioneered new forms of participation within the party, which ultimately led to new notions about larger political participation in society itself.

The current liberal democratic system in Brazil was implemented in the 1980s when the military dictatorship acquiesced to national and international pressure to return power to civilian control. The gradual transition was overseen by ruling elites—both supporters of the dictatorship and its opponents—in such a way that enabled them to retain control, albeit under the aegis of an ostensibly more democratic system (Hagopian 2007). This elite management was evidenced by a deal to institute indirect presidential elections that was reached between the dictatorship's official party ARENA (*Aliança Renovadora Nacional*) and some sectors within the only military-approved opposition party, the MDB (*Movimento Democrático Brasileiro*); ARENA and MDB were the two largest parties in Congress at the time. Indirect selection of the president by Congress gave elites more power in selecting the president. They worried that a direct election open to the masses would result in a populist, non-elite individual being elected and enacting radical redistribution projects. This accord was made even in the face of the massive street protests that swept across Brazil in 1983 and 1984 in which millions of Brazilians specifically demanded direct presidential elections. These *Diretas Já!* (Direct Elections Now!) protests included large swaths of the pro-democracy movement, with the PT serving as one of the leading protagonists (Nylen 2003:39). Ultimately, the first post-dictatorship civilian president who took power in 1985 was José Sarney representing the *Partido do Movimento Democrático Brasileiro* (PMDB), a Brazilian oligarch from the northeastern state of Maranhão who had previously been a leader in the pro-dictatorship ARENA party.[4] Thus, the return to a democratic system in Brazil did not result in a radical break from the past, but instead evidenced how the traditional, paternalistic and elite-driven system persisted.

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[3] Until 1979, all political parties were banned except than the dictatorship's official party ARENA (*Aliança Renovadora Nacional*) and the military-approved opposition party the MDB (*Movimento Democrático Brasileiro*).

[4] Tancredo de Almeida Neves (PMDB) was elected president by the electoral college in Brasília but died before taking office. This led to his vice-presidential candidate, José Sarney, taking office as president on March 15, 1985.

Popular demands for more participation in the political process being made by social movements and the PT, which were apparent in the *Diretas Já!* protests, were ultimately impossible for elites to entirely ignore. The Brazilian Constitution of 1988, which was drafted in Brasília between 1986 and 1988 by a popularly elected *Assembléia Constituinte* (Constituent Assembly) restored direct presidential elections and created new mechanisms for citizen participation. During the assembly, hundreds of citizens groups, many from the working classes and associated with the PT, mobilized to educate the population about the constitutional process through public debates and publications. These groups drafted and submitted their own popular amendments, which were guaranteed debate if they had more than 30,000 signatures. In all, more than 122 popular amendments were submitted with signatures that included more than 12 percent of the electorate. Social movements and citizens' groups also packed the galleries of Congress where the debates were being held in order to exert pressure on assembly members. While very few of the popular amendments were passed outright, their concerns were incorporated into the final, ratified version of the constitution (Holston 2009:250–252). New participatory mechanisms in what is popularly referred to as the *Constituição Cidadã*, or citizens' constitution, included the possibility for plebiscites on important issues, policy management councils that included civil society participants, and the ability for the public to initiate legislation. The PT members of the assembly, including Lula da Silva, were some of the most vocal proponents of these initiatives among the elected representatives. Overall these participatory components were a relatively minor element of the country's new legal framework. However, the inclusion of nods toward participatory democracy in the constitution demonstrates that the tension between liberal democracy and participatory democracy has been ongoing in Brazil since the return to civilian democratic control.[5] The tactic of weakening the traditional elite power structures by creating new forms of participatory democracy is not a new strategy among social movements in Brazil, but is one that they have been promoting for decades now.

The Constitution of 1988 was heralded as a victory by social movements that championed its enumeration of rights for previously marginalized groups (blacks, indigenous, etc.) and calls for more popular, democratic participation. However, the promise of inclusion has not been matched in practice. Anthropologists James Holston and Teresa Caldeira refer to this gap between what is promised and what is delivered as a characteristic of "disjunctive democracy" (Holston and Caldeira 1998). Indeed, rather than ushering in a more egalitarian society, the new legal framework allowed for the implementation of neoliberal policies. It was the first directly elected president since the dictatorship, Fernando Collor de Mello (Partido da Reconstrução Nacional, 1990-1992), a young, telegenic scion from an elite political family from the northeastern state of Alagoas, who began implementing neoliberal policies immediately upon taking office in 1990.[6] Neoliberal, market liberalization reforms had been opposed by the military dictatorship because they clashed with generals' fervent nationalist ideology. The enactment of neoliberal policies continued throughout the 1990s under the leadership of a handful of center right parties such

[5] While the Brazilian Constitution of 1988 included many of the demands of social movements and the PT, PT representatives to the constituent assembly were the only votes against the constitution because they did not feel that it was sufficiently radical, particularly in terms of agrarian reform and curtailing the power of the military.

[6] Collor de Mello defeated Lula da Silva in a presidential run-off in 1989, which was the first time since the end of the dictatorship that Brazilian citizens directly elected a president.

as the *Partido da Social Democracia Brasileira* (PSDB), whose leader and former Marxist sociologist Fernando Henrique Cardoso occupied the presidency from 1995 to 2003. These included the privatization of many state-owned companies and agencies, import liberalization, and reduced government spending (Alfredo 2010). The loss of manufacturing jobs due to lower tariff barriers for imported consumer goods and diminished state spending on social security and welfare programs disproportionally affected the working class and poor. While the implementation of neoliberal policies in Brazil was not as severe as it was in some other Latin American countries, their enactment nonetheless indicated the extent to which elite classes continued to control state power in the service of capital accumulation.

While neoliberal, market-orientated policies were being implemented on the federal level, the PT put its participatory philosophy into practice on the local level when it won a handful of important mayoral elections in 1989. The mayoral victories were made possible by the decentralization of political power in the Constitution of 1988 that granted more autonomy and political power to Brazilian cities and states. These electoral victories enabled the party to implement public policies that embodied its participatory ethos. The most emblematic of these was *orçamento participativo*, or participatory budgeting, a process whereby citizens collectively identified budget priorities and determined how government funds were spent, which was first launched in 1989 in Porto Alegre (Abers 1996; Avritzer 2007; Baiocchi 2005; Goldfrank 2003; Santos 1998). Through a series of neighborhood, regional, and citywide meetings, citizens determined how a small segment of the city budget allocated for public works would be spent in various neighborhoods. The idea was that individuals in their own communities were better judges of how money needed to be spent and that this participatory initiative would increase overall citizen engagement in politics, particularly among citizens from *vilas*, or poor neighborhoods, where the PT and other social movements had been organizing. By including poor and working class citizens in making decisions traditionally carried out by politicians or civil servants with technical expertise, participatory budgeting looked to reshape ideas about both how the state should function and whom it was meant to serve. The state was envisioned to function more in the mold of a social movement.

Brazilian ideas about participatory democracy gained a global platform with the emergence of the World Social Forum (WSF) in 2001. The WSF represented the coming together of a diverse number of social movements that shared in common a desire to contest the dominant forces of neoliberal globalization that had taken hold during the 1980s and 1990s and had increased the power of multinational corporations worldwide (Santos 2008; Sen and Waterman 2007). The WSF was global in nature and was facilitated by the spread of communications technologies, particularly the Internet. The first three gatherings of the WSF were held in Porto Alegre because of the PT-controlled local government's ability and desire to host the event. Thus, increasing democratic participation as a way to promote social justice took center stage. Porto Alegre was also the site of a burgeoning FOSS movement, which was, in part, spearheaded by the local PT militants. They were attracted to FOSS because it represented an alternative to expensive proprietary software created by multinationals, and because the collaborative way that FOSS is developed among communities of programmers resonated with notions about civic participation (Evangelista 2010; Murillo 2012). Therefore, at the WSF the relationship among technology policy, democracy, and social justice first entered into the global debate. This initial connection between technology and democratic

participation presaged current debates about Internet policy and governance that Brazilian activists continue to lead.

The momentum behind demands for participatory democracy reached new heights in 2002 when longtime leader of the PT and then presidential candidate Lula da Silva was elected president. His assumption of the presidency in 2003 along with a majority coalition of parities in Congress represented an opportunity for the party to reshape democratic participation and to reorient the state to addressing issues of social inequality. Once in power, the PT slowed the forward progress of neoliberal reforms that had been implemented in the 1990s, created a number of social welfare programs that resulted in a significant reduction of social inequality and an increase in size of the middle class, and invited social movements to work more closely with the government. However, on its path to electoral success the party's original, more radical goals of reshaping democratic participation had become significantly moderated and the party opted to push its agenda using the existing liberal, democratic political structure (Hunter 2010). Thus, while Lula's administration often rhetorically championed participatory democracy and created a political environment conducive to limited experiments with participatory democracy, the PT government did not so fully embrace it once it was in power. Indeed, it was unclear how mechanisms of participatory democracy that might have worked well on the local level could be transferred to the national level. This meant that both during Lula's administration (2003-2011) and the administration of his successor, Dilma Rousseff (2011-present), movements calling for even more forms of participatory democracy encountered resistance. It is important to note that while the PT has been a primary channel through which calls for participatory democracy have been made, not all sectors of the party have embraced it. Likewise, there are factions within the progressive left outside of the party who also champion notions of participatory democracy.[7] The ongoing tension between liberal democracy and participatory democracy is bigger than the PT itself. It encompasses larger debates in Brazil about the configuration of the political economy and the distribution of power and resources within society. It is within this political context that Internet freedom activists in Brazil have been working to secure policies that facilitate an *Internet livre* and increase democratic participation.

The Internet and the State: From Cyber-utopianism to Digital Realism

In order to understand how the tactics of Brazilian Internet freedom activists in the past decade represent a profound shift from those of Internet freedom activists in other places, particularly in the US and Europe, it is necessary to briefly explore the ideologies of Internet freedom activists in the 1990s when the Internet was first coalescing as a global network. At the time, some scholars and pundits argued that the post-Cold War era represented the dawn of a more globalized and borderless era in which nation-states were less relevant and their power was fading (Appadurai 1996; Castells 2003). At this point, what Internet scholar Morozov calls "cyber-utopianism" prevailed in which the Internet was heralded as a revolutionary technology that would by its very nature spread democracy and empower citizens worldwide (2011:xiii–xiv). Thus, because the Internet was understood to be a technological platform that transcended boundaries, many thought that it should not be

[7] A prime example of this is the opposition party Partido Socialismo e Liberdade (PSOL), which was founded in 2004 by individuals who were expelled from the PT because of their opposition to President Lula's pension reform plan, which they considered to be pro-market.

subject to state regulation or control. The Internet pioneers who helped build the Internet considered themselves members of virtual communities in which one's national citizenship was irrelevant (Goldsmith and Wu 2008). Indeed, in the 1990s the most prominent Internet freedom activists embraced "globalization" ideology and believed that states should not interfere with the Internet. This philosophy was encapsulated in John Perry Barlow's manifesto "A Declaration of the Independence of Cyberspace" published online in 1996. In it, the cyberlibertarian and founding member of the Electronic Frontier Foundation (EFF), an NGO that defends Internet freedom, proclaimed:

> Governments of the Industrial World, you weary giants of flesh and steel, I come from Cyberspace, the new home of Mind. On behalf of the future, I ask you of the past to leave us alone. You are not welcome among us. You have no sovereignty where we gather…
>
> Governments derive their just powers from the consent of the governed. You have neither solicited nor received ours. We did not invite you. You do not know us, nor do you know our world. Cyberspace does not lie within your borders. Do not think that you can build it, as though it were a public construction project. You cannot. It is an act of nature and it grows itself through our collective actions…
>
> We will create a civilization of the Mind in Cyberspace. May it be more humane and fair than the world your governments have made before (1996).

Barlow wrote the manifesto in response to the passing of the US Telecommunications Act of 1996, the first US law to directly mention the Internet. While the law's main policy objective was to deregulate the telecommunications sector, lawmakers also inserted language regulating Internet indecency and obscenity.[8] For Barlow and many of the computer "hackers" who helped create the Internet's infrastructure and protocols, this represented an intrusion of the technological platform they helped construct, and which, in their eyes, was functioning sufficiently without state intervention.

I contend that the belief that the Internet should not be subject to state control, in many ways, overlapped with neoliberal philosophy that gained traction worldwide in the 1980s and 1990s (Harvey 2005). Proponents of neoliberalism argued that state regulation interfered with the functioning of the "free market" and thus state power should be reduced so that corporations could more efficiently distribute resources and generate wealth. In this way, neoliberalism complemented "globalization" ideology endorsed by the Internet pioneers like Barlow in that it advocated decreasing the power of nation states. In the context of the telecommunications sector worldwide, neoliberal policies resulted in the privatization of many state-owned telecommunications companies and/or infrastructure in the 1980s and 1990s. In this dissertation I argue that this neoliberal restructuring of the telecommunications sector is largely responsible for creating an environment in which the decentralized computer network developed by "hackers" could spread from the US to a create a truly global network.

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[8] Portions of Title V of the US Telecommunications Act of 1996 that created penalties for indecent and obscene speech online were eventually ruled unconstitutional by the US Supreme Court because it violated the First Amendment of the US Constitution, which protects free speech.

However, while neoliberalism relaxed government regulations and allowed for the growth of the Internet, the growing power of multinational corporations that neoliberal policies enabled would later become one of the biggest threats to an open and free network. This is because while neoliberal rhetoric espouses a "free market" and champions competition, in practice neoliberal policies lead to a concentration of wealth and the creation of monopolies and corporate cartels. Thus, while the creation of a decentralized network was a response to popular demands, particularly those of the Internet pioneers, it was also ultimately compatible with the neoliberal policies of multinational corporations and financial institutions that are now in the process of capturing the network for commercial profit.

As the cyber-utopian euphoria surrounding the Internet in the 1990s subsided, in the early 2000s activists became more cognizant of the real power that states possess in terms of regulating the Internet. Indeed, the physical infrastructure on which the Internet depends (i.e., telecommunications cables, computer servers, data centers, etc.) is subject to the laws of the countries in which they are located. The creation of the "Great Firewall" in China in 2003, a massive, nationwide Internet surveillance and censorship project, as well as instances in which countries in the Middle East effectively cut off access to the Internet nationwide during political uprisings during the Arab Spring in 2011, drew attention to the real power states retain in controlling the flow of information on the Internet (Morozov 2011). State control also has been extended to flows of content. Court rulings in Europe that ordered the removal of material deemed offensive showed how the threats against freedom of expression were not restricted to authoritarian regimes, but were also taking place in well-established democracies like France (Goldsmith and Wu 2008).

In the past decade Internet freedom activists worldwide have changed course from working against any form of state intervention in Internet policy to acknowledging the power of states and taking efforts to help shape policy that protects Internet freedom (MacKinnon 2013). I argue that Brazilian Internet freedom activists have been global pioneers of this new focus among Internet freedom activists worldwide to pressure states to defend Internet freedom. What makes Brazilian activists particularly interesting is that they are not only focused on changing laws and state policies, but they are also working to change the mechanisms by which these decisions are made. In this sense, they are not only pressuring the state, but also actively challenging how state power is organized. I argue that this focus is due to the influence of ideas about participatory democracy that emerged during the Brazilian redemocratization process as social movements and political parties worked to envision a post-dictatorial Brazilian society.

Methods: Ethnographic Fieldwork in the Digital Age

My analysis is based on more than 20 months of multi-sited ethnographic research conducted over four years in Brazil between 2010 and 2014. The majority of my time was spent in the cities of Porto Alegre and São Paulo, which are home to the some of the most important organizations promoting Internet freedom (e.g., *Associação de Software Livre* in Porto Alegre and *Coletivo Digital*, *Intervozes*, and the Brazilian Internet Steering Committee in São Paulo). In these two cities I spent time with activists, participated in activist-organized events, and conducted extended semi-structured interviews with individuals in order to capture their activist trajectories and experiences. I also conducted shorter stints of research in the nation's capital, Brasília, where I conducted interviews with activists as well as government officials in both the executive and legislative branches in order to understand the

process through which policy and law are created in Brazil. Overall, I conducted more than 60 semi-structured interviews. The data from my observations and interviews were meticulously recorded into my field notebook and these data represent the core of my analysis.

During the course of my fieldwork, I traversed the country and became a regular attendee at the most important technology conferences heavily attended by individuals concerned with Internet freedom (e.g., *Fórum Internacional de Software Livre (*FISL*), Campus Party Brasil*, *Fórum da Internet do Brasil*, *Conexões Globais*, and the *Congresso Internacional Software Livre e Governo Eletrônico*). Given that activists are geographically dispersed throughout Brazil, these gatherings represent critical networking opportunities for activists, some of whom rarely meet in person. These spaces provide an opportunity to discuss issues, develop strategies, and draw attention to their cause. At these gatherings I attended presentations, observed activist interactions, and conducted interviews on the sidelines. These highly attended conferences allowed me to interact with a large swath of activists, not just those based in São Paulo, Porto Alegre, and Brasília.

In addition to more traditional in-person participant observation, the very nature of the type of Internet-related activism I was observing required that I also become an active digital ethnographer. This involved two related, but distinctive, components. First, many activist groups worldwide rely on the Internet and digital technologies for internal organization (email, video chat, text messaging, collaborative word processing, etc.) as well as outreach and publicity (websites, social media, video, etc.). This was particularly true of the Brazilian Internet freedom activists who were constantly experimenting with new technologies and media to accomplish both of these tasks. I methodically recorded their digital publications (blog posts, social media posts, videos, etc.) in order to capture how they were presenting their values and objectives to the public. After developing rapport with key informants, I was invited to join an activist-only, private organizing email listserv created in 2012. This access allowed me to follow the internal debates among activists as they frankly discussed both tactics and policy. These digital materials and the process through which they were elaborated have been valuable in informing my understanding of how activists operate. That is, my data include electronic records of the collaborative process by which manifestos, statements, and strategy documents were produced. Having access to these data allowed me to understand the collective process by which Brazilian Internet freedom activists operate.

Second, Brazilian activists are pioneering a double-pronged (in-person and virtual) protest tactic that they refer to as operating *na rede e na rua* – online and on the street. Activists believe that influencing public opinion through active participation on social media is important, but that it must be accompanied by more traditional activist tactics, such as street protests and mobilizations at Congress, in order for it to be most effective. In practice this means that street protests were often broadcast live on the Internet. These protests were simultaneously accompanied by online protests, such as *twitaços*, when activists bombard social media like Twitter with posts in order to generate attention from the public and press. This combined, interactive dynamic has amplified their impact. Thus, my digital ethnography took many forms and entailed spending countless hours in front of my laptop recording activist media productions and accompanying protests performed both online and in cities around Brazil.

While in some cases ethnographers employ pseudonyms in order to protect individual privacy, I have not done so in this case because it was neither necessary nor practical. The

people chronicled in this dissertation are often high-profile individuals or activists who want their opinion to be broadcast to a larger audience. Indeed, everyone I interviewed specifically gave me permission to use their name in publications. It is my hope that the voices of these individuals will come through in my research. As such I have quoted them at length when necessary. Since virtually all of the research material I collected is in Portuguese (interviews, emails, social media posts, news articles, activist publications, etc.), I have translated into English the majority of the material I present. All translations are my own unless otherwise noted. At times I have preserved specific phrases in the original Portuguese, and in these cases the Portuguese phrases are written in italics. It is my belief that both the use of real names and the incorporation of quotes adds validity to my research and also creates a valuable resource for future researchers.

Outline of the Dissertation

Throughout this dissertation I analyze the local particularities and political contexts that have shaped Brazilian Internet freedom activism. In Chapter 2, I examine the emergence of the Internet beginning in the 1970s in the US and demonstrate how its creation and spread is socially embedded in terms of how its development is entangled with larger socio-political forces. I demonstrate how the global expansion of the Internet in the 1990s was linked to neoliberal policies, but also how in Brazil the concomitant spread of FOSS resulted in the software's incorporation as the technological platform of a larger, anti-neoliberal political project among left-wing labor union organizers aligned with the PT. This history exemplifies how Brazil has served as a base for developing counter-hegemonic technological futures and helps explains the emergence of the techno-political Internet freedom activism in Brazil. Ultimately, I argue that the political context and cultural values of the individuals who steered the geographical spread of the Internet to Brazil expose how local particularities have shaped the creation of a global network.

In Chapter 3, I specifically examine activist mobilization against a cybercrimes bill that led to the conceptualization of an Internet freedom law that enumerated citizen rights on the Internet. I show how the practices and discourse of this mobilization were highly influenced by the pro-democracy movement of the 1970s and 1980s. I then argue that the activists' demand to draft the bill's text via an online, collaborative website represents the application of notions of participatory democracy to the development of Internet policy. Activists referred to this collaborative approach to lawmaking as the "hacking" of the legislative process because for them, this collaborative process that included more voices was less beholden to powerful lobbies and is thus more democratic. I examine how the rhetoric of participatory democracy was applied to creating Internet policy, yet I also show how the process involved less citizen participation than is often represented.

In Chapter 4, I examine how the logic of participatory democracy embedded in the creation of the *Marco Civil da Internet* – the Civil Rights Framework of the Internet – collided with the logic of liberal democracy once the bill was introduced to the Brazilian congress for debate. The elite-controlled, liberal democratic system, which is highly influenced by corporate interests, resulted in the bill being stalled for three years in large part due to the opposition of the telecommunications industry. At this juncture, Internet freedom activists resorted once more to traditional social movement tactics to influence policymakers and legislators. Ultimately, revelations about NSA mass surveillance generated a renewed interest in Internet policy and captured the attention of President Rousseff, who soon adopted

the banner of Internet freedom and made the *Marco Civil da Internet* a part of her political platform. Thus, together Chapters 3 and 4 recount the unlikely story of the passage of the Civil Rights Framework of the Internet, which has now been hailed by Internet activists worldwide as the blueprint for a global Magna Carta of Internet rights.

In Chapter 5, I examine the creation and development of the Brazilian Internet Steering Committee (*Comitê Gestor da Internet*), a national Internet policy advisory board. I argue that by creating this institution in 1995, Brazilian Internet freedom activists negotiated the neoliberal restructuring of the state during the 1990s in such a way as to construct an institutional mechanism to defend against corporate capture of Internet governance by telecommunication companies. I highlight the ways that Internet freedom activists have been pushing to increase democratic participation by creating elected positions from non-profits and NGOs on the committee and also by holding yearly forums that allow interested citizens to affect the committee's agenda. Ultimately, the development and strengthening of this organization represent a unique tactic by which Brazilian Internet freedom activists are carving out an important institutional platform that is not corporate-dominated from which they can defend the Internet as an open, public platform for creative and civic engagement. However, I also draw attention to the way that the new channels of participation have also been opened up for corporations, which raises the question of whether or not this arrangement is capable of resulting in radical change.

In Chapter 6, my concluding chapter, I analyze the impact of Brazilian Internet freedom activists on global Internet policy by examining the significance of the NetMundial Internet governance summit held in April 2014 in São Paulo. The fact that President Rousseff called this global summit in the aftermath of the revelations about NSA mass surveillance is evidence of the extent to which Brazil became a leading protagonist in developing global Internet policy. In large part this has been due to the work of Brazilian activists who have successfully influenced Brazilian government policy. Indeed, the Brazilian Internet Steering Committee helped organize the meeting and President Rousseff held up the *Marco Civil da Internet* as a model law for other countries to replicate. However, many of the Internet freedom activists themselves were excluded from the summit, which was largely reserved for official government, industry, and NGO representatives. Thus, activists organized their own, parallel summit called Arena NetMundial at which they continued to make demands for increased democratic, citizen participation in developing Internet policy. Drawing on legal scholar Lawrence Lessig's argument about how computer *code* takes on the function of legal *code* in that it shapes individual conduct (2000), I argue that the contribution of Brazilian activists at NetMundial was to insert new participatory notions about the creation of Internet policy into an emergent global Internet legal code.

While in the early days of the Internet many held to the cyber-utopian belief that the computer network's spread would inevitably empower citizens and lead to more democratic societies, the work of Brazilian activists shows that this is not the case. Democracy does not merely arrive alongside new technology, but rather it is nurtured and constructed. The Internet is just the latest battlefield for much larger struggles over how society should be governed and what democracy actually means. The ubiquity of the Internet means that the fight to democratize the global network is imperative. There is no doubt that Brazilian Internet freedom activists will be on the front lines of these debates as they work not only to shape the future of the Internet, but of democracy itself.

CHAPTER 2

FROM SOFTWARE LICENSES TO GLOBAL NETWORKS – THE CULTURE AND POLITICS OF BRAZILIAN INTERNET FREEDOM ACTIVISTS

It was 8:00 in the evening on a Friday night in Porto Alegre, yet the large conference center auditorium at the *Pontificia Universidade Católica* was packed to the seams with more than a hundred young, mostly male, hackers and techies who were seated and anxiously awaiting one of the last and most anticipated presentations of the day. The conference-goers had traveled from all over Brazil to participate in the eleventh annual *Fórum Internacional de Software Livre* (FISL), one of the largest FOSS conferences in the world. However, the session they had gathered for was not about software production or computer programming. Rather, they were waiting to listen to a presentation about threats to Internet freedom titled *A Internet Sob Ataque II: O Império Contra-Ataca* ("The Internet Under Attack II: The Empire Strikes Back") by professor of sociology Sergio Amadeu. The title ominously compared the forces that would restrict Internet freedom to the evil Galactic Empire in George Lucas's *Star Wars*. It no doubt captured the attention of the hackers at the conference, many of whom were fans of science fiction and who most likely instantly understood the warning of a potentially dystopic future. Amadeu, one of the most well-known figures of the Brazilian FOSS movement, was famous for his captivating speeches that mixed academic theory with real world examples and his ability to distill complex concepts into easy to understand, colloquial language.

The room quieted when Amadeu arrived. Like most of the conference attendees, he was casually dressed. His t-shirt had the words "I love to share" in English emblazoned on the chest. Amadeu began his impassioned presentation by arguing that even though the Internet was a decentralized network that empowered individuals to create and share, the increasing ubiquity of the technological platform could also be harnessed to create new mechanisms of control and surveillance.[9] He discussed a handful of new laws and recent judicial rulings around the world that targeted Internet users on peer-to-peer (P2P) networks and social media who had been sharing music, video, and software. In Amadeu's analysis, one of the driving forces behind these "attacks" on the Internet came from the *indústria da copyright* – the copyright industry – the pejorative term he used to refer to companies that generate profit from their intellectual property, the most notable examples being media and IT companies. The financial and political clout of these companies, particularly in the US and Europe, meant that they were able to successfully lobby for the passage of legislation that criminalized sharing of knowledge and required the increased policing of Internet users, which represented a fundamental threat to an *Internet livre* according to the professor. Implicit in his talk was a critique of liberal, representative democracy because of the ways it was producing Internet policies that he argued were contrary to the popular interest. To close his presentation, Amadeu charged the audience to take action on legal, judicial, and

[9] He drew heavily on media studies scholar Alexander Galloway's book *Protocol*: *How Control Exists after Decentralization* (2004), which argues that control in the form of software protocols, not freedom, is the central organizing principle of the Internet.

technological fronts to defend the Internet because "liberty in the future depends on our victories in the present." To drive home his point about what was at stake he flashed an image of the Star Wars character Obi-wan Kenobi holding a lightsaber on the screen. This reminded the audience members of the moral imperative behind efforts to defend the *Internet livre* as well as the uphill battle that they seemingly faced.

From Software Licenses to Global Networks

I initially went to Porto Alegre to study the Brazilian FOSS movement, which had gained global attention in the early 2000s as it became closely aligned with the left wing PT. For me, as a middle-class, progressive American who had grown up with personal computers and who had taught myself HTML as a hobby in order to make webpages in the 1990s, the way that software had been at the center of this unique techno-political movement was fascinating. However, the more time I spent with FOSS activists, the more it became apparent that the issue that most electrified them at the moment was Internet policy. The fact that Sergio Amadeu's presentation was one of the most popular of the more than two hundred presentations at the conference was evidence of this. Indeed, Amadeu, a FOSS militant since the late 1990s, had been appointed by President Lula da Silva in 2003 to spearhead a government initiative to increase the use of FOSS in government, but now almost a decade later and out of government he was rallying activists to defend Internet freedom. This shift in focus among activists altered my own research agenda as I decided to concentrate on the nascent techno-political Internet freedom movement in Brazil, of which FOSS activists were just one component. Initially, I believed that the apparent shift I saw from software activism to concerns with Internet policy represented a very recent change in activist interests. However, as I spoke with more people during the course of my ethnographic research and conducted my own research on the development of the Internet, I realized that, in fact, the emergence of FOSS and the Internet were intrinsically linked. I came to understand that the two could not so easily be conceptually disentangled, but were part and parcel of the same larger social and technological processes.

In this chapter, I focus on the emergence of the Internet in the 1970s and 1980s in the US and its subsequent global spread to Brazil in the 1990s in order to demonstrate how this networking technology was shaped by individuals and produced within particular socio-political contexts. In exploring the intertwined spread of the Internet and FOSS in Brazil I show how Brazilian academics and activists who envisioned an alternative role for technology in society imbued the Internet and software with new meanings involving democracy and social justice. First, I present a historical overview of the emergence of the Internet in the US. I demonstrate how the rise of the "hacker ethic" – the belief that sharing, collaboration, decentralization, and the free exchange of ideas were beneficial to technological innovation – among computer programmers in US computer labs in the 1960s shaped the creation of the global network as well as led to the creation of FOSS in the 1980s. Then, I shift to Brazil and draw on ethnographic interviews with Brazilians involved in both the development of the Internet in Brazil and the spread of FOSS. I start with two individuals credited with spearheading the first Brazilian connections to the Internet in 1992 – computer engineer Demi Getschko and former political exile and pro-democracy activist Carlos Afonso. I show how efforts to create a decentralized global computer network were spearheaded in Brazil by academics and social justice activists. Next I explore how the spread of the Internet to Brazil exposed more people to FOSS by examining computer

programmer Nelson Lago's experience launching one of the first commercial Internet service providers (ISPs) in the mid- 1990s. His case demonstrates how the "hacker ethic" and FOSS were practically embedded within the physical infrastructure of the network, and thus those ideologies were disseminated along with the Internet. Finally, I explore how labor union organizers Marcelo Branco and Mario Teza discovered FOSS and ultimately embraced it as part of a larger, anti-neoliberal political movement and helped launch the Brazilian FOSS movement. I argue that the political context and cultural values of the individuals who steered the geographical spread of the Internet to Brazil expose how local particularities have shaped the creation of a global network. This substantiates my argument that the Internet is socially embedded.

The fundamental values espoused by Brazilian Internet freedom activists and the current structure of the Internet itself can be directly traced to FOSS ideology. The technical and legal arguments about software licenses that began in the 1980s in the US precipitated larger moral debates about access to knowledge, intellectual property, and democratic governance at the same time the Internet coalesced as a global network. FOSS programmers worldwide were instrumental in creating the technical framework on which the Internet was based (computer protocols, Internet service providers, website programming languages, etc.), and simultaneously the Internet became key to the spread of FOSS and the values and relationships that it exemplifies (Coleman 2013; Kelty 2008).

I explore the politicization of the Brazilian FOSS movement at the intersection of global FOSS ideology, left-wing politics and the anti-neoliberal globalization movement (Evangelista 2010; Juris 2005; Murillo 2012) in order to explain how this well-organized, techno-political movement has emerged as an organizing base and ideological wellspring for more recent Internet freedom activism in Brazil. While not all Brazilian Internet freedom activists have a FOSS background, the FOSS legacy explains the emphasis on openness, freedom, and democratic participation that is central to the current ideology of Internet freedom activists in Brazil. Furthermore, Brazilian Internet freedom activists have more recently marshaled the links created between FOSS activists and some sectors within the PT to affect policy change.

Ultimately, my goal in this chapter is not to focus on any one specific moment in the development of the Internet, but rather to expose the unfolding nature of this process over time and the different political tendencies within it. By doing so, I will link the creation and the configuration of the Internet to larger social trends that have become embedded in the network. Central among these is neoliberalism, which is a "theory of political economic practices that proposes human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, the free market, and free trade" (Harvey 2005:2). Neoliberalism initially gained traction in the 1970s and 1980s in the US and Europe and led to the deregulation and privatization of state resources, including in the telecommunications sector, as advocates claimed that private sector competition would eliminate bureaucratic red tape, increase efficiency, improve quality, and reduce costs; state intervention was understood to be detrimental to the functioning of markets (Harvey 2005:65). Furthermore, neoliberal emphasis on private property rights resulted in the enactment of strict intellectual property regimes (copyright, patents, etc.) as intellectual property, and the ability to profit from it, was increasingly seen as the driver of the emergent "knowledge economy." In Brazil, neoliberal policies were embraced by the business elite and began being implemented in the 1990s.

These policies restructured the information technology sector, which had previously been highly protected by import-substitution industrialization (ISI) policies created by the nationalist military dictatorship beginning in the 1970s (Schoonmaker 2002). Neoliberal policies primarily benefitted large corporations and resulted in capital accumulation worldwide, yet they also had unintended consequences. For example, neoliberal deregulation and decentralization in the 1990s created the openings for the type of open, global network that hacker computer programmers had envisioned. This, in turn, gave rise to the global FOSS movement which contests corporate control of knowledge and technology.

My historical and ethnographic study is inspired by academic contributions from the field of science and technology studies (STS) that challenge technological determinism and highlight the political nature of the development of technology (Ceruzzi 2003; MacKenzie and Wajcman 1999; Winner 1980). My research demonstrates that there is no innate logic or definitive technical rationale for the current structure of the Internet. Rather, the Internet is a constantly evolving and contested technological platform that both reflects and creates social values and relationships. Thus, what is currently at stake in battles over the future of the Internet are essentially competing visions of what the Internet is and what it should be. Sociologist Saskia Sassen has argued that social scientists have too often focused solely on the way that technological changes have affected society rather than looking at how technology is embedded in society (2002). In this chapter, I heed her call to develop a more embedded perspective. My analysis shows that as Brazilians made efforts to connect Brazil to the Internet, they did not merely reproduce the libertarian "hacker ethos," but rather reinterpreted it and imbued it with new meanings that were constantly contested. This in turn has led to a robust and politically engaged techno-political movement inspired by ideas of participatory democracy that first mobilized around FOSS and is now focused on Internet policy.

The Hacker Ethic

The technological innovation that led to the formation of a global computer network, the Internet, and the development of FOSS began in the 1960s and 1970s at large computer labs at government agencies, private corporate research centers and, most importantly, public universities in the US. The computer scientists who worked at these institutions, and who spearheaded both of these projects, self-identified as *hackers*. A hacker was not a pejorative term referring to a computer criminal, but rather a positive moniker for a creative computer programmer who was able to find solutions to intractable technical problems, oftentimes in an unexpected way.[10] The term hacker was first used in 1961 among computer scientists at the MIT Artificial Intelligence Lab who understood a *hack* to be not only a technical accomplishment that served the greater good because of the problem it resolved, but also one in which the hacker derived pleasure from the formidable technical challenge. In part influenced by counterculture ideas circulating at US universities in the 1960s and 1970s, these hackers had idealistic notions about the potentials of technology and held to a "philosophy of sharing, openness, decentralization, and getting your hands on machines at any cost to improve the machines, and to improve the world" (Levy 1994:vvi). They believed

[10] The term "hacker" developed a pejorative meaning in the 1980s and is now commonly used to refer to criminals who exploit network security flaws to steal information. Non-criminal hacker communities distinguish themselves from these individuals by referring to them as criminal hackers, or "crackers."

in the free exchange of knowledge, they mistrusted authorities and bureaucracies, and they subscribed to meritocratic ideals that an individual should be judged by the work they actually produced rather than their title or position. These values, which have been labeled the "hacker ethic," proliferated in computer science communities worldwide. Ultimately, they became embedded in the technologies computer programmers produced, which include both FOSS and the Internet (Castells 2003; Kelty 2008; Levy 1994). Because the "hacker ethic" first emerged in the US in the 1960s and had some libertarian political characteristics, particularly in terms of support for decentralization and individual meritocracy, in some ways it resembled emerging neoliberal political thought. On the other hand, however, the mistrust of authority and the opposition to any restriction to knowledge sharing places the "hacker ethic" in opposition to neoliberal corporate enclosure of intellectual property. Thus, the "hacker ethic" is a capacious philosophy not easily mapped onto political ideologies. Nonetheless, a discussion of the emergence and spread of the Internet and the development of FOSS demonstrates how the two are inextricably entwined and how hacker values are at the core of the vision of the Internet embraced by Internet freedom activists.

The First Networks: Openness as a Value

The development of the Internet has been a gradual process in which a number of diverse, independent computer networks operating with various hardware and software have been slowly connected through the standardization of the software protocols that allow them to communicate. Of the early computer networks, the most important was ARPANET, which was funded by Advanced Research Projects Agency (ARPA) of the Department of Defense, and was the first, high-speed transcontinental computer network. In the wake of the Soviet Union's launch of Sputnik 1 in 1957, the US government invested heavily in science and technology research. The military was particularly interested in developing networking technology that would allow various military computers and communications installations to communicate. ARPA mobilized computer scientists in the government, the private sector, and academia to devise technologies that would make this possible. The work of the hackers in these institutions centered on technical questions about how information should be digitally communicated, what hardware platforms should be used, and how the network could and should be structured. ARPANET itself was not directly employed for military purposes; rather it was largely an academic research project to explore the possibilities of computer networks. ARPANET was a constantly evolving experimental project in which researchers could test out different software and networking strategies.

In an ironic twist, while the research concerning computer networking was funded by the US military, which was known for its secrecy and desire to create closed, centralized systems, the computer scientists who actually built the network created an extremely open and decentralized system (Castells 2003). This was because of their background in the academic world where the values of openness and peer-review were highly regarded. It was the networked embodiment of the hacker ethic. The technical expertise of the computer scientists gave them a certain degree of autonomy to develop technology as they saw fit. Their military supervisors, who did not understand the intricacies of computer networking, often acquiesced to the technical decisions made by the programmers and engineers.

ARPANET was deployed in 1969 and initially connected just four computer labs – UCLA, UCSB, the Stanford Research Institute, and the University of Utah. Two technological innovations resulted from the evolution of ARPANET that are key to the

functioning of the Internet: Packet-switching and Transmission Control Protocol/Internet Protocol (TCP/IP). ARPANET was the first computer network that employed packet-switching. In 1964, before ARPANET was launched, young mathematician Paul Baran, who was working at the Rand Corporation in Los Angeles, was tasked with envisioning a network that could withstand a nuclear attack in which a central communications hub was taken offline. He conceived a distributed, decentralized network with no central authority, in which the nodes of the network were redundantly connected in order to improve reliability. Digital messages sent from one computer to another would be split up into a number of small units, or packets, which would be routed through different channels on the network to their final destination, at which point they would be recombined (Baran 1964). This packet-switching system differed from traditional, circuit-switched networks, such as telephone networks, where a direct connection is created between the origin of the data and its destination. In analog telephone systems, information transmission is coordinated by a central communications hub that opens up a direct connection between two points in the network. A packet-switched, digital network like ARPANET did not have a central hub. This means ARPANET was decentralized in that it did not depend on any one component of the network in order to continue functioning.

The other key innovation was the TCP/IP software protocol. Originally developed by computer scientists working at ARPA in 1974, Vincent Cerf and Robert Kahn, TCP/IP software protocol dictates how data is formatted, addressed, transmitted, routed and received on the network. In essence, these protocols are the language that allows the computers to communicate on the network. Building off of Baran's decentralized network, Cerf and Kahn developed a system of independent and autonomous networks that were connected by "routers" that would direct information across the network. It is important to remember that TCP/IP was not the only or even the first of such computer protocols. ARPANET was already using another protocol, Network Control Program (NCP), and there were a number of alternative protocols being developed by computer scientists worldwide, most notably the x.25 and Open System Interconnection (OSI) protocols developed in Europe that had been adopted by the International Telecommunications Union (ITU) and the International Organization for Standardization (ISO) as global standards.

What made TCP/IP unique was its relative simplicity, which in turn meant that it allowed a number of types of computer networks running on different hardware and software to connect using a basic standard operating language. For example, less complex BITNET networks used by a number of US universities could eventually be integrated into the network because they also supported TCP/IP. At this point in the late 1970s and 1980s, there was no global standard for computer networking. The debates over what protocols should be used on the emergent global network were known as the "protocol wars" (Salus 1995). Governments, informatics corporations, and academics debated which protocol should emerge as the global standard. Hackers, in particular Cerf and Kahn, lobbied hard to have their TCP/IP system adopted. Largely because of their advocacy, in 1983 the US military decided to implement TCP/IP across ARPANET. By this time ARPANET had grown significantly (including connecting to some computer labs in Western Europe) and was the largest and most advanced network worldwide (Salus 1995). American corporations like IBM and Apple soon followed the lead of the US Department of Defense. Ultimately, in large part because of its adoption in the US, which has traditionally been a leader in the

information technology sector, TCP/IP prevailed in the "protocol wars" and became the protocol of the emergent global Internet.

The implications of protocols in shaping the Internet become clearer when one thinks about what a global computer network based on another protocol might have looked like. The Geneva-based ITU, a UN agency, adopted the x.25 network protocol in 1976 as the international standard for computer networks. Worldwide, the largest proponents of the x.25 network protocols were the state-owned post and telecommunications agencies (PTTs) of a number of Western European countries. At the time these agencies were organizing to build separate centralized, government-controlled networks in each of their countries. These national networks would then be connected to each other at their national borders. The most famous example of this type of x.25 network was the French Minitel system created by France Télécom, which was operational until 2012. Unlike TCP/IP networks that allowed for network diversity and decentralization, in an x.25 system the control and accountability of the network was in the hands of public network providers as opposed to dispersed among the various computers accessing the network as in the TCP/IP system. Indeed, PTTs were reluctant to let private networks link up to their public systems (Castells 2003:26). The x.25 system was attractive to the European PTTs that wanted to maintain their government monopolies on access to information, but this came at the expense of other groups – academics and the private sector – who were independently developing their own networks. The centralized, national vision of an inter-connected global network embodied in x.25, which was being promoted in statist Europe, differed starkly from the decentralized vision exemplified in TCP/IP that had been developed in the US. The academics in the US who helped create TCP/IP were opposed to centralized management of the network, but this left open political questions about how the emergent global Internet would actually be governed if it was not primarily the domain of nation-states to perform this role.

Ultimately, TCP/IP became the global standard both because of the US military's official endorsement and because it was popular among hackers worldwide who were attracted to its flexibility and accommodation of network diversity. The popularity among hackers is, in large part, due to the fact that the TCP/IP protocol was included in one variant of the UNIX operating system – the Berkeley Software Distribution (BSD) – which was the most widespread operating systems in computer science labs worldwide (Salus 1995). Networking computers depended on compatible software programs, and since UNIX was widely available it was a logical choice to use it as a de facto global standard. It is important to note that the fact that it was distributed without a cost among hackers was not a given. Rather, the development and dissemination of UNIX gave birth to a new ideology about how to create software that would eventually become known as the FOSS movement. At its core, this movement pushed back against the notion that access to software code should be restricted, which was increasingly commonplace as informatics corporations were increasingly commercializing software as a standalone product and thus concealing the source code so that it could not be copied. Hackers felt that corporate attempts to limit access to source code in order to increase profits was immoral because it hindered the free flow of knowledge and ideas. In this way it critiqued neoliberal notions about private property rights, which were increasingly being applied to intellectual property in the digital age. This central critique of the neoliberal intellectual property system ultimately launched a larger global movement against corporate attempts to restrict the flow of knowledge and information in areas beyond just software.

UNIX and the Birth of Free and Open Source Software (FOSS): Contesting Corporate Control of Knowledge

In the 1980s the UNIX operating system, which was developed and owned by AT&T's Bell Labs, was the predominant operating system used by computer science labs, particularly in the US. Prevented by court order from entering the computer market because of its telephone monopoly, AT&T licensed the software for a nominal fee to computer programmers at academic labs. UNIX was unique in that it was relatively simple and was portable among a number of computer systems. As such, UNIX became a *lingua franca* of programmers worldwide, including hacker communities. AT&T distributed the source code of UNIX, which allowed programmers to see how the software functioned and also to make changes to improve it. Programmers shared customizations, bug fixes, and hacks to make the software more stable on a variety of platforms. This sharing was often done by physically mailing the magnetic tapes that stored the software from lab to lab. Because AT&T was not commercializing the software, it permitted the quasi-legal circulation of these variations, which in computer science terminology are referred to as "distributions." The flexibility to develop these variations allowed the merger of UNIX and the TCP/IP protocols at the heart of ARPANET, thus "creating a situation wherein UNIX operating systems came to be not only the paradigm of operating systems but also the paradigm of *networked* computers" (Kelty 2008:120). Furthermore, the community of sharing that evolved around UNIX, in essence, generated a new collaborative software development model in which hackers in different locations were working on the same projects. It also raised ethical and legal questions about who actually owned the code – AT&T or the software programmers who developed it. Indeed, throughout the 1980s AT&T became increasingly concerned with enforcing its copyright over the software by controlling and restricting the circulation of different distributions. As intellectual property was increasingly understood as the driver of the so-called knowledge economy, corporations like AT&T were becoming more vigilant about staking claims to intellectual property because they saw it as central to their profit-making strategies.

Unhappy with AT&T's efforts to restrict access to UNIX, computer scientist Richard Stallman of MIT's Artificial Intelligence Laboratory launched the GNU Project in 1983, a collaborative software development initiative to create a UNIX-compatible operating system comprised completely of non-proprietary code. In 1984, Stallman founded the Free Software Foundation (FSF) in Boston, Massachusetts, to coordinate this project and to promote the development of other types of "free" software. In this case, free did not refer to the cost, but rather the liberty involved in being able to see, study, share, and change the software according to one's own needs. For Stallman and his followers, it was immoral to restrict the flow of information in the form of restricting access to source code. He proposed a new development model based on hacker collaboration and the free flow of information. In most places worldwide, including the US, software is considered intellectual property that is subject to copyright. Copyright is a government-approved monopoly on the ability to profit from intellectual property for a specified period of time. Copyright holders of software licenses (individuals or corporations) are able to legally enforce their monopoly over software use, distribution, and sales. In 1989, Stallman created the GNU General Public License (GPL), which is a software license that programmers can apply to their work, which requires the software and all of its derivatives be distributed freely. The GPL, often referred to as "copyleft," essentially prohibits the privatization of any software that uses "free" code

(Coleman and Golub 2008; Coleman 2010; Kelty 2008). Because it is based on the dominant global copyright system that gives copyright owners control over the use of their work, it has legal standing in countries where copyright law is enforced. This hack of the copyright system, through the creation of the copyleft, created a legal framework for free software to exist. It creatively used intellectual property law, which is most often used to restrict the circulation of knowledge, to ensure that software code was publicly available at no cost. This undermined the neoliberal tendency to commodify intellectual property for the purpose of generating a profit.

In the 1990s, the spread of the Internet spurred the use and development of free software and also transformed how computer programmers collaborated on software projects. In 1991, Linus Torvalds, a Finnish computer science student at the University of Helsinki, started working on his own, free version of the popular MINIX software, which is a UNIX-like software primarily used to train programmers. He announced his project to other programmers on USENET, an Internet discussion board system, and then released the code of the program so that other hackers could contribute to his project by improving and writing new source code that could be incorporated into the software, which he named Linux. Torvalds then served as a curator of the project and managed the integration of the various contributions. What made Linux so important was that when combined with software developed via Stallman's GNU project, GNU/Linux served as a comprehensive operating system that was completely free and licensed under the GPL. Because of its practicality, very quickly a virtual software development community including thousands of programmers emerged around Linux. It eventually became one of the most popular computer operating systems worldwide, particularly among hackers who were using it to connect to the Internet. What also set it apart was that it represented the first large-scale collaborative software project done almost entirely via the Internet. Thus, it served as a model for a new form of software development. This shows how technological innovations gave rise to new social practices, in this case global, non-proprietary software projects.

As the number of programmers in free software projects grew in the 1990s, an increasing number were less concerned with Stallman's radical, anti-corporate ethos and more interested in the collaborative programming method it employed and that they considered superior to proprietary development models. They argued that the benefits of this method included the quick debugging of the software because of the increased number of individuals who had their eyes on the code. Also, the customizability of free software made it more desirable than proprietary software, which often was not flexible enough to meet the needs of individual users. They also were more interested in creating business models that would financially support the development of the software.

In the late 1990s, a new business model emerged whereby start-up companies distributed free software, such as versions of the GNU/Linux operating system, but then charged a fee for providing technical support to users. In 1998, programmer Eric Raymond called upon hackers to use the term "open source software" as an alternative to "free software" in order to accentuate this business-friendly posture (1998). He founded the Open Source Initiative to lead the charge by creating licenses that were more restrictive than the GPL. This allowed proprietary software corporations to "open" parts of their code, while limiting access to other parts. Corporations such as IBM, Apple, and Microsoft, which had fiercely opposed free software because they saw it as a threat to their bottom line, launched open source initiatives in order to profit from this new trend (Hess 2005).

For Stallman and his followers who supported "free software," the new term "open source" referred more or less to the same thing as "free software," but "without talking about freedom or presenting the issue as a matter of right or wrong" (Stallman 2014). Thus while the schism between free and open source software represented a real philosophical difference among hackers, in the end both types of software licenses represented alternatives to the dominant proprietary software model. For this reason both became commonly referred to collectively as free and open source software, or FOSS. Moreover, the focus on digital collaboration and sharing had broader social consequences in that it launched a movement for individuals to become actively engaged in producing and disseminating knowledge. These practices would reach a larger audience with the expansion of the Internet to a broader public in the late 1990s. The emergence of FOSS is important because it presaged current battles over the flow of information on the Internet as corporations sought to restrict access to intellectual property that they claimed ownership over. It also represented a new form of collaborative knowledge production facilitated by networking technologies that would later be applied to realms beyond just software.

The World Wide Web and the Emergence of the Digital Commons

Changes in US government policy that resulted in transferring the backbone of the network to private corporations in the 1990s transformed the Internet from a platform primarily restricted to a small number of computer scientists at research labs to a much wider, commercial audience. This process began in 1985, when control of ARPANET was transferred from the military to the US National Science Foundation and was rechristened NSFNET. The creation of NSFNET extended access to more individuals by increasing the number of academic institutions in the US and abroad that were connected to the network. However, NSFNET was reserved for academic research and there was already intense interest from the private sector to commercialize the network. Indeed, private computer networks such as America Online and CompuServe,already had large subscriber bases, and it was apparent that selling access to the network could be potentially lucrative. In 1995, NSFNET was decommissioned and control of the backbone of the network was transferred to a handful of private sector telecommunications corporations. It was hoped that the privatization of this "Information Superhighway," as it was referred to by the Clinton administration in the US, would radically transform the American economy by increasing access to the network by individuals and corporations. Policymakers and corporations envisioned the Internet as ushering in a new, knowledge-based economy in the US. This transition from an industrial economy to one based on intellectual property was the result of neoliberal policies first enacted in the US in the 1980s during the Republican administrations of Reagan and Bush and continued during the Democratic administration of Clinton in the 1990s (Harvey 2005). The privatization of the Internet's telecommunications infrastructure backbone dovetailed anti-state neoliberal rhetoric of the time. The Clinton administration argued that the so-called "Information Superhighway" was vital to the US's national interest, but tellingly the network itself was largely transferred to private hands.

The launch of the World Wide Web in 1991 represented a new stage in the massification of the Internet. British computer scientist Tim Berners-Lee, who was working at CERN in Geneva, Switzerland, along with his Belgian counterpart Robert Cailliau, developed the suite of protocols to both create and browse web pages – Hyper-text Transfer Protocol (HTTP) and Hyper-text Markup Language (HTML). In the early 1980s, Berners-

Lee had developed a hyper-text software called ENQUIRE, and with the increased access to the Internet he realized that if these two technologies were wedded they could transform how people shared information. Indeed, the true genius of the system of graphic web pages that are viewable using a web browser was its ease of use and flexible format. It made accessing information much easier for people who were not skilled computer programmers and adept at interpreting computer code. In 1993, Berners-Lee released these software protocols into the public domain. This meant that they would not become proprietary and that no one would need to pay licensing fees in order to use these protocols. This ensured the open nature of the World Wide Web by creating a global standard accessible to anyone who was interested in creating a webpage.

The digital platform that the World Wide Web created blossomed in the 1990s and 2000s. For many, it became practically synonymous with the Internet itself. It was also here that a new "digital commons" coalesced after the turn of the century. The principles of sharing, collaboration, and openness that are central to the Internet and FOSS generated a number of other initiatives that promoted the free exchange of knowledge and culture. A host of open source and open access initiatives were fostered by the emergence of this new platform (Kelty 2008). One example is the Creative Commons initiative launched in 2001 that creates a licensing system for creative works (music, photos, video, etc.) based on the GPL licenses. The free and collaboratively edited online encyclopedia Wikipedia, also launched in 2001, represents another project that can be traced to the ethos of FOSS. The spread of the Internet, and in particular the emergence of the World Wide Web, has led to the generation of a new, commons-based peer-production model largely inspired by FOSS (Benkler 2006). Thus, while the spread of the Internet was linked to economic liberalization policies associated with neoliberalism, it also sparked a movement to expand commonly held resources in the form of the "digital commons" that stands in stark contrast to neoliberal philosophy about privately-held intellectual property.

Technological Geographies: The Birth of the Brazilian Internet

The Internet spread beyond the US and Western Europe in the 1990s and 2000s, extending its reach to Brazil. The digital platform became truly global in scope. Yet, the technical process of building the network, which included both the creation of the physical computer infrastructure and decisions about what software and computer protocols to use to do this, took place in locations with very different socio-political contexts. In Brazil it was taking place in the immediate wake of the return to civil control of the government and the formation of a new political framework embodied by the Constitution of 1988. I will now turn to the Brazilian case to show how these varied political geographies and cultural particularities became entangled in the Internet, which substantiates my argument that the Internet is a socially embedded technology. I will also highlight the entwined relationship between the Internet and FOSS to explain how philosophies of openness, collaboration, and participation spread as the Internet expanded and took on different meanings in Brazil. These processes demonstrate how the Internet as a technological platform is socially embedded and also how these technologies, particularly FOSS, were viewed as tools through which to combat economic and political exclusion.

Bringing the Internet to Brazil: Science and Technology Researchers Take the Lead

Brazilian academics, primarily science and technology researchers in the STEM fields, played a pivotal role in building the first Brazilian computer networks in the 1980s. These academics were interested in connecting to research centers in the US and Europe. Many of them had spent time abroad during academic exchanges and had become accustomed to computer networking technologies, such as email. They were eager to use these new technologies to communicate with colleagues abroad in order to exchange ideas and to integrate research initiatives. The first step to connecting to the emergent global Internet was to create a computer network within Brazil that would then be able to interface with international networks. In 1988, the São Paulo public state education foundation, the *Fundação de Amparo à Pesquisa do Estado de São Paulo* (FAPESP), created a team of computer scientists to network the state universities of São Paulo (USP, UNICAMP, and UNESP). The individual who was chosen to lead the team was electronic engineer Demi Getschko, a young professor at the time with expertise in computer science and telecommunications who had been the director of FAPESP's data center since 1985. Based on his expertise working with large mainframe computers, he was tasked by the administrators at FAPESP with setting up a network that connected the state universities. This network would eventually be named the Academic Network of São Paulo (ANSP), and would be the launching point for Brazil's first connection to the Internet a couple of years later.

I met with Getschko at his office in São Paulo at the *Núcleo de Informação e Coordenação do Ponto BR* (Brazilian Network Information Center, or NIC.br), an NGO that administers Brazilian web domains (i.e., web domains with .br country codes), collects data about Brazilian Internet use, and makes suggestions on Internet policy. Getschko founded NIC.br in 2005 and has been the director ever since. The center is affiliated with the Brazilian Internet Steering Committee, of which Getschko is also a board member. His congenial nature and slightly disheveled office full of books and policy papers gave him a professorial air. The history he recounted to me about connecting Brazil to the Internet was exceedingly technical in nature, which attests to his technical background. However, at the heart of his work over the years appears to have been a desire to spread access to technology, first among academics and then to the broader Brazilian public at large. Getschko's story is important because it demonstrates the role of Brazilian academics in promoting TCP/IP in Brazil on technical grounds because it was the same system academics in the US were using. While the implications of this decision were not entirely clear at the time, this eventually played into emerging Brazilian neoliberal projects to dismantle the state-owned telecommunications system.

The network Getschko began creating in 1986 used BITNET technology, which was point-to-point "store and forward" technology in which information was passed in its entirety from one server to another until it reached its destination. BITNET was a popular networking platform among US universities at the time because it was relatively inexpensive, and because while it did not use TCP/IP it was still capable of exchanging emails with computers connected to the Internet. The prevalence among US institutions and its relative low cost, given that FAPESP already possessed the necessary IBM computers, made BITNET appealing to Getschko and his colleagues. Brazilian physicists in São Paulo had a long working relationship with American peers at Fermi, which was connected to BITNET and made it a prime candidate for partnering to create the international connection. First though,

Getschko needed to get the approval of the *Secretaria Especial de Informática* (SEI), a federal agency created during the protectionist military regime, to approve all international data links. According to Getschko, SEI could not understand why two distinct institutions (i.e., not different branches of the same university) would want to have a data link. Nonetheless, he was able to convince them to approve the connection. The first international connection between ANSP and BITNET took place in September 1988 through a connection with Fermi National Laboratory in Illinois. When institutions joined BITNET they were informally obliged to leave an "open door" for other institutions to connect to BITNET. This led to a "chaotic and collaborative" extension of BITNET services in Brazil as other institutors connected to ANSP to gain access to BITNET. In particular, individuals and institutions were interested in email and discussion group platforms.

The connection to BITNET in itself was a significant technological milestone; however, connecting to the Internet, which offered a much broader network of information sharing, was the ultimate goal. Fermi National Laboratory informed Getschko that they were going discontinue BITNET and transition to the Internet as part of the US Department of Energy's Energy Sciences Network (ESNET) run by the Lawrence Berkeley National Laboratory in San Francisco, which was in turn connected to NSFNET. However, at the time the Brazilian Ministry of Communications and Embratel, the federal telecommunications company, were still supporting x.25 and OSI protocols, which were the official international standards supported by the ITU. Both were opposed to TCP/IP networking technologies. This was an impediment to connecting to the Internet, which was based on TCP/IP. Getschko was a vocal proponent of TCP/IP because he felt that OSI was a clunky, difficult to implement technology that mainly served the needs of large telecommunications companies (e.g., it included a billing function). For him, OSI "was great for the telecommunications companies, but it was not great for the academic world." As it became clearer to network administrators that TCP/IP would win out in the "protocol wars," Getschko decided to disregard Brazilian government policy and connect to the Internet using TCP/IP. In part, this was due to the fact that in the US, TCP/IP had already won the "protocol wars" and so if Brazilian academics wanted to connect to the Internet they were left with little alternative. Ultimately, the first connection to the Internet in Brazil was made in January 1991 between ANSP and ESNET.

The academic community in the state of Rio de Janeiro had been simultaneously organizing since the late 1980s to create a link to the Internet via their own state academic network, *Rede Rio*, which connected large, academic computer labs at federal universities in the state (PUC-RJ, UFRJ, and LNCC-CBPF). In May 1992, a link was created between *Rede Rio* and the California Education and Research Federation Network (CERFNET) in San Diego, California. The Internet connection was made during a public ceremony in which computer scientists demonstrated the capacity of the Internet by searching the UCLA library system for resources on famous Brazilians (Sávio 2006:105). Thus, by 1992, the Brazilian academic community had successfully created two functioning links to the Internet. This is important because it mirrors the process in the US where computer scientists, engineers, and physicists were the driving force in creating a non-commercial network. However, because of the way both connections relied on US links to connect to the Internet, an email sent from Rio de Janeiro to São Paulo would necessarily pass through the US. Indeed, this reliance on US infrastructure for transferring data persists to this day, albeit to a lesser degree. Now, much of the content transferred among Brazilians passes through servers in the US. This can happen either because of the way the telecommunications backbone still relies heavily on the

US network or because many companies providing Internet services that Brazilian are using have their servers based in the US.

After these initial connections were made, Getschko continued working on initiatives to increase access to the Internet in Brazil. He was one of the principles, along with officials from *Rede Rio* and the federal government, in discussions about creating a national Internet backbone that would connect Brazilian universities. He was also involved in discussions about what institutional framework made the most sense in order to make Internet access commercially available to individual users at home via dial-up connections. Getschko believed that rather than have the state-owned telecommunications monopoly Embratel sell service directly to individuals, it made more sense for the company to be a provider for smaller Internet service providers (ISPs). This decentralized system he felt made more sense for the Internet. Due to his role in helping extend the Internet, Getschko has subsequently been dubbed the "Father of the Brazilian" Internet. While in fact a number of individuals were necessarily involved in such an undertaking, the fact that Getschko has been continuously involved in Internet governance and administration since the 1990s does make him one of the most knowledgeable and respected individuals in the field. In Brazil technical experts like Getschko have retained a high profile in administering components of Internet infrastructure, primarily via the Brazilian Internet Steering Committee, a semi-governmental Internet advisory panel, and its related institutions such as NIC.br, where Getschko is president. Thus, the technical vision of Brazilian science and technology researchers to create a decentralized, non-state controlled communication tool for the exchange of information using TCP/IP laid the groundwork for the current configuration of the Brazilian Internet.

Networking for Democracy: The Internet as a Tool for Solidarity

The Brazilian case differs strikingly from the extension of the Internet in almost every other country, in that in Brazil social activists played a leading role in expanding the Internet. In the 1980s and 1990s, social movements worldwide quickly embraced new information technologies like the Internet because of the political organizing and information sharing capabilities they offered. One of the Brazilian activists who first recognized these potentials and sought to exploit them was a man by the name of Carlos Afonso, a political exile during much of the dictatorship period due to his socialist beliefs who returned to Brazil in the 1980s when the regime was allowing more political dissent. His case demonstrates the role of pro-democracy activists in helping to spread TCP/IP in Brazil and shows how the Internet was conceptualized as a tool that citizens and social movements could use to generate global solidarity networks to combat repression. In 1981, he helped found *Instituto Brasileiro de Análises Sociais e Econômicas* (Ibase) in Rio de Janeiro along with Herbert de Souza (Betinho) and Marcos Arruda. All three of these men had been political exiles during the military dictatorship, but had returned as the military regime was easing restrictions on political dissent as part of a slow transition to electoral democracy. Ibase's goal was to foster a transition to democracy, and marshaling the power of new information technologies – particularly the Internet, which became central to its mission. In particular, the activists at Ibase focused on extending access to the Internet beyond the academic community in hopes of increasing access to the Internet among average Brazilian citizens. One of the organization's mottos was "*Democratizar a informação para democratizar a sociedade"* (Democratize information to democratize society). Carlos Afonso, a lifelong technology enthusiast, spearheaded the organization's focus on democratizing access to information

technology. I met with Afonso while he was visiting São Paulo to attend meetings at the Brazilian Internet Steering Committee. During our interview he recounted his role in helping bring the Internet to Brazil. The tools he employed to do this, most importantly using UNIX-based systems as opposed to x.25 protocols, reflected a philosophical tendency to eschew centralized technologies. In part this was because he had seen how the military regime was able to monopolize communications technologies (primarily television) in such a way as to censor political dissent. Decentralization through the use of TCP/IP would prevent such government censorship in the age of the Internet.

Originally from a middle class family from the interior of the state of São Paulo, Afonso first became captivated by technology as a 12-year-old child when he completed a course for radio technicians via correspondence and spent his free time fiddling with electronics. His childhood interest led him to pursue a degree in engineering at the *Universidade de São Paulo* (USP). He started his degree in engineering in 1964, the same year in which the military took control of the country via a coup. Even though Afonso came from a conservative family from the interior, as a young man at the university he became exposed to socialist thought and quickly embraced the ideology. This led him to join the student movement against the dictatorship, which was avowedly anti-communist. He eventually became one of the movement's leaders at USP. Due to a unique arrangement, the Brazilian navy actually ran the engineering department at USP, which made his activism particularly dangerous. His engagement in the movement led to his brief imprisonment in the 1960s. Ultimately, his situation in São Paulo was so precarious that in 1970, he was forced to seek exile in Chile, which was then governed by the socialist administration of Salvador Allende. Afonso's socialist views dovetailed with Allende's political project and he took a position in the government's planning ministry. However, he was once again forced to flee military repression when General Augusto Pinochet orchestrated a violent overthrow of the Chilean government. This time, Afonso fled to Canada, where he enrolled in economics and social theory courses at York University in Toronto, and became a more active user of newly developing digital networking technologies, such as bulletin board systems (BBS), which were allowing political activists worldwide to communicate and mobilize. He bought an Apple II personal computer, which was first produced in 1977 and was a novelty in North America, and practically nonexistent in Brazil where import-substitution policies made non-Brazilian-produced computer equipment prohibitively expensive. This personal computer and two floppy discs were some of the few items that he brought back with him to Brazil in 1980. Along with this cutting-edge technology, he also brought back with him a passionate desire to harness new digital technologies to foster the development of a vibrant democracy as Brazilian returned to civilian control of the government. For Afonso and his colleagues at the newly formed Ibase, the democratic opening presented an opportunity to develop in Brazil a form of social democracy that addressed long-standing issues of poverty, income inequality, and distribution of wealth by including the marginalized, poorer masses into the democratic process.

In Afonso's estimation, networking technologies were a way to assist activists in their work of laying the bases for democratic governance. For him they were revolutionary, particularly in the southern hemisphere. He told me, "Communication in the era was television, which was unilateral," by which he meant that average viewers had very little input in what was broadcast in Brazil on the Globo monopoly, which had close ties to the dictatorship and did not broadcast any political dissent. In contrast, these new, more

interactive technologies would allow for more open debate and the dissemination of material that otherwise might be censored. Under Afonso's guidance, in 1985, Ibase launched ALTERNEX, a BBS that allowed Brazilian activists and civil society groups working on issues such as human rights and the environment to communicate with their counterparts both nationally and internationally. The name ALTERNEX is a combination of *Alternativo* (Alternative) and *Nexo* (Nexus) and it was similar to other international bulletin board systems such as PeaceNet, ConflictNet, and EcoNet that also served activist communities. It was not a full Internet connection, but it did give groups access to email, information databases, and teleconferencing capabilities, which were increasingly vital for activists in an emerging transnational environment where mobilizations and information sharing were increasingly essential.

The reliance on networking technologies among activists was now so important that when the United Nations decided to hold the United Nations Conference for Environment and Development (UNCED) in Rio de Janeiro in 1992 (commonly referred to as Eco-92) UN organizers decided that allowing environmental groups to connect to the Internet was imperative. An Internet connection would enable participants to communicate with their colleagues who were unable to make the journey to Brazil, but who still wanted to participate in these global discussions. Indeed, this was the first UN summit open to civil society participants, and thus attendance was anticipated to be potentially quite large. UN organizers recognized that the Internet had not yet been extended to Brazil, so they asked Afonso's organization, Ibase, to lead the effort to create a link to the Internet in Brazil to make sure conference attendees would be able to access the Internet and other networking platforms to which they had become accustomed. Thus, Afonso was tasked with quickly cobbling together the necessary technology to make this happen. Essentially, what the UN organizers were asking for was a "hack" to bring the Internet to Rio de Janeiro for conference goers.

On a tight budget and with a relatively short amount of time, Afonso decided that the most efficient way to bring Internet access to the conference would be through a UNIX-based computer network that was connected internationally using TCP/IP. Legally speaking, using TCP/IP in Brazil was technically illegal because it was not a standard endorsed by the ITU. However, it was the standard of the emerging global network and what international activists and civil society participants would be expecting. Thus, Afonso felt the risk was worthwhile and he gleefully accepted his role as an "IP Guerilla" whose technical decisions helped create and consolidate a Brazilian connection to the Internet that relied on the open, decentralized TCP/IP technologies. Ultimately, Afonso's work paid off. During the Eco-92 conference, thousands of participants were able to connect to the Internet to exchange email, access bulletin boards, and search databases.

The success of the Eco-92's Internet connection was a practical demonstration of the global dominance of TCP/IP and the role of social justice activists in contributing to this vision of a global network. After the conference was over, in large part due to Afonso's belief in the potential democratizing power of Internet access, ALTERNEX began offering service to residents in Rio de Janeiro and became the first commercial ISP in Brazil. For the first time, citizens who were not linked to a university or a civil society organization like Ibase were able to connect to the Internet from their homes. While the actual numbers of connected individuals was incredibly small and restricted to the city of Rio de Janeiro, the fact that a pro-democracy organization founded by former political exiles was at the forefront of the effort to increase Internet access demonstrates how this new digital technology was so

closely linked to democratic aspirations in the country. Afonso's case demonstrates how the Internet as a technological platform was perceived to be uniquely suited to generating global solidarity networks that could then be marshaled to combat persistent inequality.

Neoliberal Reforms: An Opening for the Internet and the Spread of FOSS

The arrival of the Internet to Brazil happened at a time when the telecommunications sector was being privatized as part of a wave of neoliberal reforms that were implemented throughout the 1990s. Paradoxically, while on the one hand these economic reforms were an affront to the work of activists like Afonso because they resulted in increased social inequality, on the other hand, deregulation created a temporary opening for the expansion of the Internet within the framework of a hacker-envisioned global network that was open and decentralized. Ever since 1972, when the military dictatorship created the state telecommunications corporation Telebrás, all telecommunication functions in Brazil were controlled by the state monopoly, including determining which networking protocols were permissible in the country. In 1992 Collor de Mello, the first directly elected president since the dictatorship, started the process of privatizing Telebrás. This was completed in 1998 during the administration of Fernando Henrique Cardoso, at which point Telebrás was broken up into twelve regional carriers that were then auctioned off to private investors (Adachi 2011). In 1992, Collor de Mello also abruptly dismantled ISI policies in the informatics sector originally implemented with the aim of fostering Brazilian technological development by generating an internal market supplied by nationally developed and produced technology (Schoonmaker 2002). While ISI was successful at fostering a information technology industry, the tariffs placed on foreign imports made computers relatively much more expensive than in the United States and Europe, particularly personal computers used by the middle classes. The deregulation of the IT sector meant that the price of personal computers fell significantly as imports increased. Thus, the Brazilian middle classes could now afford to have personal computers at home. Additionally, the elimination of the state monopoly in the telecommunication sector meant the end of the official government policy of only using x.25 protocols for computer networking. Hackers exploited increased access to hardware and a liberalization of restrictions on networking protocols. Deregulation created an environment in which the hacker vision of a decentralized, open Internet could be expanded.

Not surprisingly, as the Internet spread it took along with it FOSS and the radical ideology embedded in it, which at its core challenges neoliberal philosophy. The case of a young computer enthusiast, Nelson Lago, in the 1990s in São Paulo demonstrates how the growing global computer network became a vehicle for the spread of FOSS and the ideology embedded within it. It also exemplifies how the changing regulatory structure in the Brazilian information technology sector created space for a very brief period when small providers, both private and publicly owned municipal providers, become a driving force for the spread of the Internet in Brazil before large telecommunications corporations entered the market. I interviewed Lago for the first time in São Paulo at the *Centro de Competência em Software Livre* (CCSL) at USP, where he is currently employed as the Technical Director. While Lago's path from a teenage computer hobbyist to his current position as director at an academic institution that develops and promotes FOSS is somewhat unique, during my research I found that a large number of Brazilian FOSS activists were first exposed to FOSS

when they became interested in surfing the web and creating their own Internet connections in the 1990s.

In the early 1990s, Lago was a teenage computer hobbyist in São Paulo who did freelance work as a graphic designer. In the late 1980s, he started using the proprietary Microsoft Disk Operating System (MS-DOS) on his home computer and was so advanced that he even gave classes to his friends. He transitioned to the graphical interfaced Microsoft Windows 3.0 operating system after its release in 1990s and started working with PageMaker desktop publishing software owned by Aldus Technologies and later purchased by Adobe Systems Inc. Like others in the early 1990s, Lago sensed a growing excitement among young, urban middle class Brazilians about the possibilities of connecting to a global network with vast quantities of information and the prospect of connecting with people globally. He loved the idea that if someone was interested in a relatively specific topic, like origami, he could go online and connect with hobbyists worldwide and learn more than he ever wanted to know. This information revolution is what drove him to want to connect. However, access to the Internet in Brazil was still largely limited to a handful of small academic computer labs in São Paulo and Rio de Janeiro. In 1995, motivated by his own desire to access the Internet and a belief that many shared his desire, Lago partnered with three friends to launch an ISP, which would provide Internet access to paying customers in the São Paulo metropolitan area. The neoliberal reforms meant that the government was now actively promoting the development of small ISPs rather than advocating for a state monopoly. This change in federal policy is what allowed Lago and his partners to pursue creating the ISP. They playfully named their endeavor "That's Internet!" The fact that the name of their company was in English rather than Portuguese demonstrates how the Internet was perceived as a foreign, and specifically American, technology.

While conducting research on how to technically configure and operate the computer hardware necessary to run an ISP, Lago came across FOSS for the first time. A computer science student at USP who was an acquaintance of Lago's suggested they use GNU/Linux as the operating system on their server. At the time, GNU/Linux was the most popular software worldwide for this purpose because it included TCP/IP and was available at no cost. Lago went to the computer science department at USP to obtain a copy of GNU/Linux. He and his partners specifically purchased Linux-compatible computer motherboards, because at the time there were still many motherboards that were not compatible with the software. They rented a small office and purchased 10 telephone lines and modems, and then contracted with the Brazilian branch of the informatics corporation Unisys to provide them with their connection to the Internet. When "That's Internet" debuted in July 1996, it was one of roughly a dozen small ISPs in the São Paulo metropolitan region. In the next couple of years the number of subscribers hovered around 250. According to Lago, "That's Internet!" never generated a profit, but it always broke even.

By 1998, the partners decided to sell their business to a larger ISP. This transaction was part of a larger process whereby a number of small ISPs were purchased by the large telecommunications companies that had emerged in the wake of neoliberal reforms, and which increasingly recognized that providing Internet service to households was a lucrative business venture. The temporary opening that neoliberal reforms created for hobbyists like Lago quickly gave way to an era in which the provision of Internet access was increasingly concentrated in the hands of a few large telecommunications corporations that viewed the Internet as a source of profit. Thus, in the long run, neoliberal restructuring of the

telecommunications industry would still prove to be a threat to the Internet, even if in the early days it seemed to benefit its expansion. Ultimately, while "That's Internet" may have been a short-lived venture, Lago's introduction to FOSS would have much more enduring effects.

Lago was almost instantly attracted to FOSS when he ran across it, not just because of its functionality, but also because of its philosophy of openness, collaboration, accessibility, and meritocracy. He became active in a number of online FOSS development communities and a member of the São Paulo NGO called Linux-SP. The NGO provided technical assistance to city-run, public access computer labs, or *telecentros,* in low-income neighborhoods that were created during the mayoralty of Marta Suplicy (PT). Ultimately, Lago decided to pursue a Ph.D. in computer science at USP under the tutelage of professor Fabio Kon, who helped found the CCSL, which is one of nine centers in a global network aimed at increasing the use of FOSS. As CCSL's Technical Director, Lago was tasked with giving courses in FOSS programming and disseminating information about FOSS at technology conferences and gatherings. Thus, he ended up becoming one of the country's most high-profile FOSS evangelists. In particular he has participated in the movement against allowing corporations in Brazil to patent software, which he considers a threat to knowledge sharing and technological innovation. Lago's history demonstrates both the role of specific individuals in expanding the Internet in Brazil as well as how, through this process, the ideologies embedded in the Internet's structure that are exemplified by FOSS reached a larger, global public.

The Politicization of FOSS: Democratizing Digital Technologies

The dissemination of FOSS globally was linked to the expansion of the commercial Internet; however, as these two technologies spread geographically they encountered diverse social contexts and became imbued with new political meanings. Individuals and groups reinterpreted their significance and marshaled them for new purposes. In Brazil, individuals highly active in labor union organizing, and the PT specifically, embraced FOSS, and it became linked to the movement against neoliberal globalization. For these activists, FOSS's opposition to corporate enclosure of intellectual property and the fact that it challenged foreign, primarily US, corporate domination of the informatics sector represented a refreshing technological vision that created alternative possibilities for Brazilian development. Thus, the "hacker ethic" that developed in the US merged with a radical left-wing ethos in Brazil and FOSS was seen as the technological component of a movement combatting the increased power of private corporations.

The process of reimagining FOSS in Brazil did not occur in the traditional technology hubs of São Paulo and Rio de Janeiro, but rather in the industrial city of Porto Alegre, the capital of the far southern state of Rio Grande do Sul. Since the 1980s, the city has been a bastion of left wing politics and labor union organizing. It has been a stronghold of the PT, which governed the city for 16 consecutive years beginning in 1989. The local wing of the PT turned the city into a laboratory for experiments in participatory democracy, most notably participatory budgeting. David Harvey has called Porto Alegre a "rebel city" because of how its progressive environment fostered movements that resisted neoliberalism and generated alternative visions of the future (2012:xii). Thus, it is not surprising that the city was the site of this reconceptualization of the significance of FOSS.

Two of the leading protagonists in this process were the IT professionals Marcelo Branco and Mário Teza, who both came of age politically in the early 1980s as young, middle class college students from Porto Alegre when the popular mobilizations to end the dictatorship reached a fever pitch. It was at this time, that they became union members and active PT militants. I met both of these men while conducting my research in the city. While I interviewed them separately, their histories as some of the catalysts of the Brazilian FOSS movement are so intertwined that I recount them here together. They have starkly different personalities. Branco is flashy and outspoken, while Teza has a gentle and more subdued manner. However, they both share an idealistic vision of a radically reorganized Brazilian society, in which wealth and power should be more equally distributed. In large part because of their background, technology became central to this political project.

After graduating college in the early 1980s, both Teza and Branco joined the labor force at state-owned informatics corporations. Branco worked with computer network administration while Teza's work was largely administrative in nature. They quickly became actively involved in the local telecommunications worker's union, the *Sindicato dos Telefônicos do Rio Grande do Sul* (SINTTEL-RS) and the *Federação Nacional dos Empregados em Empresas e Órgãos Públicos e Privados de Processamento de Dados, Serviços de Informática e Similares* (FENADADOS). Both in turn were linked to the newly formed national umbrella labor union *Central Única dos Trabalhadores* (CUT). Founded in 1983 in the São Paulo industrial periphery, CUT was closely linked to the PT, and in the early 1980s was staging strikes against the military regime to push for higher wages and quicker democratic reforms.

CUT was the embodiment of what has been referred to as *novo sindicalismo*, or "new unionism," in that it represented a cross-industry union structure that sought to foster greater member participation in decision-making. In this way it represented a rupture from corporatist, vertically organized relationships between labor unions and the Brazilian government that were first instituted in the 1930s by the government of Getúlio Vargas during the *Estado Novo* (Keck 1995). In the Brazilian corporatist model, in order to ensure harmony between labor and capital, the state took a central role in creating and managing unions, which were differentiated according to profession and social roles (i.e., metalworkers, teachers, bank workers, etc.). During the populist Vargas dictatorship, these state-sponsored unions were perceived of as valid channels of working class demands. This legitimacy weakened in the 1970s and 1980s under the military dictatorship when economic growth slowed. Union leaders were increasingly perceived as not being sufficiently independent of the regime, and thus, not working for the benefit of rank and file union members. In contrast, proponents of *novo sindicalismo* encouraged members to become the central protagonists in crafting union objectives which transcended profession and which were based on horizontal, working-class solidarity (Keck 1995:32–33). In essence, more democratic participation was perceived as necessary within unions in order to make them the true channels of working class demands.

Teza and Branco were active members in their local unions. They participated in the multi-day regional and national union congresses in Brazil at which union members from many sectors collectively hashed out plans for collective action to bring working class demands front and center as Brazilian society transitioned from dictatorship to democracy. The values and practices in which the two young men were immersed as labor union militants and PT militants shaped their activism. The principles of increased democratic

participation and horizontal solidarity continued to motivate them as they pursued careers in the public informatics sector. It is through this lens that they reimagined the potentials of FOSS when they encountered it and incorporated the technology into a larger, left wing political agenda. Teza and Branco believed that the state should have a larger role in setting technology policy and that FOSS in particular was particularly well suited to fulfilling the needs of the PT's initial political project of redistributing wealth and power in Brazil.

Teza was first introduced to GNU/Linux in 1997 while he was working at the Porto Alegre branch of SERPRO (Serviço Federal de Processamento de Dados), the federal data processing company. He came across a magazine article about Coletiva Linux, a small business in the city of Curitiba that provided technical assistance to companies that used the operating system GNU/Linux, and he instantly became interested in FOSS because it was distributed without a cost. This was particularly appealing to a public administrator who was looking for cost effective technology solutions. He first installed FOSS on computers at SERPRO in his free time in what he referred to as a "non-authorized" experiment. He did more research on the philosophical underpinnings of FOSS and became familiar with the anti-corporate, counter-hegemonic ethos espoused by Richard Stallman. He started conversations with fellow IT workers like his old network engineer friend Branco about the software and its potentials. Branco, in fact, had first come into contact with FOSS in 1994 when he was working at Porto Alegre's data processing company PROCEMPA (*Companhia de Processamento de Dados do Município de Porto Alegre*) on the effort to launch the first ISP in Porto Alegre called PortoWeb. PortoWeb's servers relied on GNU/Linux. However, Branco had not stopped to ponder the potential significance of FOSS until Teza brought it to his attention again in 1997. At this point, the two became even more intrigued by the emphasis on collaboration and participation inherent in FOSS. The horizontal networks of computer programmers worldwide who collaboratively produced software and then released it into the digital commons intrigued them. The creation and distribution of software was a collective political act in their opinion. Ultimately, they associated the ideology behind FOSS to their own leftist, political visions and connected software to larger goals of reshaping society to make it more democratic. Neither Branco nor Teza were computer programmers themselves, but they understood the importance of software in an increasingly digital world. For them, promoting the production and use of FOSS was a way to help construct a more equitable world.

In 1998, Branco and Teza were given a larger institutional platform from which to promote FOSS when Olívio Dutra (PT), long-time bank worker's union organizer and one of the founding members of the PT, was elected governor of Rio Grande do Sul in 1998. This resulted in new PT leadership at the state's informatics corporation *Companhia de Processamento de Dados do Estado do Rio Grande do Sul* (PROCERGS). Branco joined as Technical Director and quickly rose to the position of Vice President in 2000. He brought Teza to PROCERGS to lead a group focused on promoting FOSS in the public sector. Their work promoting FOSS was blessed by the President Marcos Mazoni, who would also became a strong supporter of FOSS. Branco and Teza became convinced that a physical gathering of FOSS advocates was necessary to mobilize individuals to support their cause and to pressure policymakers to take action. This belief in the power of in-person gatherings was shaped by their earlier experiences in labor union organizing. Thus, Teza started the preparations for such a conference by reaching out to local Linux programming communities and university computer science departments. The first FISL took place on May 4 and 5, 2000, at the

campus of the Universidade Federal do Rio Grande do Sul (UFRGS). Notably, Richard Stallman, the founder of the GNU Project, was flown to Porto Alegre to give one of his quirky, thought-provoking lectures about how proprietary, corporate-owned software was an affront to individual liberty and freedom. Teza, however, had drastically underestimated the interest in the software conference. While he and others had originally expected no more than a couple of hundred people to participate, ultimately 2,210 people participated and the event was broadcast live on the Internet. The physical gathering of FOSS enthusiasts, who had previously primarily interacted with each other only virtually, created a new venue for them to discuss their goals as an emergent techno-political movement.

The FOSS activism of Branco, Teza, and others convinced Governor Dutra (PT) to embrace FOSS adoption as a component of state public policy. Dutra began advocating for an increased use of FOSS in government. Because of the way Dutra incorporated the software into his anti-neoliberal political platform in 2000, Linux Magazine, an international magazine devoted to FOSS, dubbed Dutra the "Free Software Governor." For Dutra, FOSS was a viable alternative to the expensive proprietary software of foreign multinationals, like Microsoft, on which state agencies largely depended. Thus, it represented a form of national technological autonomy. Furthermore, Dutra explicitly connected FOSS to participatory democracy when he suggested it could be used for participatory budgeting. In the interview with Linux Magazine Dutra stated, "We make an important contribution to citizenship, using our professionals and investing in non-governmental organizations to produce software that makes the life of citizens easier, with more participation in State control. Imagine if everyone in Rio Grande do Sul can participate from the definition of the budget and the control of investments, from their homes, using Free Software produced by the State?" (Murillo 2012:25). Dutra's comments demonstrate how software, specifically FOSS, had become enmeshed in the PT's political agenda, which also included a strengthening of state power in the name of more egalitarian distribution of wealth.

The following year, Porto Alegre hosted the first World Social Forum (WSF), a gathering of activists and social movements from around the globe who were advocating for a non-neoliberal vision of global development. The conference's location in Porto Alegre was in large part due to the institutional strength of the local PT and its desire to host global activists. In large part because of the influence of local FOSS activists like Teza and Branco, FOSS was eventually incorporated into the global platform of the organizers of the WSF (Juris, Caruso, and Mosca 2008; Murillo 2012). In this way, FOSS became globally linked to the anti-neoliberal movement that was gaining steam worldwide at the beginning of the 21st century.

The success of the first FISL conference resulted in PROCERGS continuing to organize the event for the next three years. In 2003, Branco, Teza, and other FOSS activists decided to form the *Associação de Software Livre* (ASL), an NGO whose principal role would be to organize the event each year. According to Teza, even though the organization is based in Porto Alegre, they gave it a generic name that did not reference Rio Grande do Sul or Brazil because they envisioned the organization leading larger national or perhaps even international movements to promote FOSS. Indeed, FISL has grown since 2000 and now often attracts upwards of 5,000 people. The vast majority of attendees are Brazilian, but a number of foreigners, particularly invited speakers, also attend. This makes it one of the largest FOSS conferences worldwide. The focus has expanded beyond merely software to include technology more broadly. The motto of the conference is *A tecnologia que liberta –*

technology that liberates. It encapsulates the organizers' goal of reimagining technology as a tool geared toward promoting creativity while at the same time reducing social inequalities exacerbated by neoliberal capitalism. In this way, these "free" technologies represent mechanisms to help construct a more democratic and open society.

After helping launch the Brazilian FOSS movement in the early 2000s, Branco and Teza continued to be key players in movements to democratize technology. In 2003 during the Lula administration, Teza was given a management positions at the *Empresa de Tecnologia e Informações da Previdência Social* (DATAPREV), a federally-owned data processing corporation associated with the Ministry of Social Security, where he worked to increase FOSS use in the agency and was one of the most vocal supporters of FOSS in the federal government alongside Sergio Amadeu, the professor-activist mentioned at the beginning of the chapter. Branco left PROCERGS and spend a couple years in Barcelona performing consulting work for the regional government on digital issues. In 2008, he helped launch *Campus Party Brasil*, an annual, weeklong technology festival in São Paulo. The event was organized by the Spanish company Futura Networks, which had organized similar events focused on gaming and digital culture around the world. However, Branco insisted that, much like FISL, discussions about the political nature of technology needed to be front and center at the event. Thus, a series of talks and debates about technology production and use were incorporated into the festival. In this way, along with FISL, *Campus Party Brasil* became one of the most important organizing events for Brazilian FOSS and Internet freedom activists. Both Branco and Teza continued their relationship with the PT, and Branco was the social media director for Dilma Rousseff's presidential campaign in 2010.

The case of Branco and Teza demonstrates how the meanings of FOSS were transformed in the Brazilian context. Whereas the "hacker ethos" of the American computer scientists who first created FOSS in the 1980s was highly indebted to libertarian notions about individual freedom, in Brazil FOSS became linked to movements against neoliberalism that promoted forms of participatory democracy. The ideas about the importance of broad-based democratic participation that emerged out of *novo sindicalismo* and informed the ethos of the PT became entwined with a techno-political project that had FOSS at its core. The development of an organized FOSS movement in Brazil with close party ties to the PT ultimately would be central to the emergence of Internet freedom activism in Brazil in the late 2000s.

Conclusion: Alternative Visions of Technology

The work of individuals highlighted in this chapter shows how the Internet, like all technology, is socially imbedded and has taken shape amid larger social, political and economic trends. It is the result of the efforts individuals who have been shaped by their social context and thus reflects larger socio-political trends. Seemingly technical decisions, like using TCP/IP instead of .x25 protocols, have larger political implications. This was particularly apparent in Brazil where using TCP/IP was perceived as counteracting a centralized communications system that had been created during the military dictatorship. These technical decisions then generate new material realities that, in turn, shape the social context. For example, the dissemination of GNU/Linux software in Brazil in order to connect to the global network via TCP/IP spread FOSS ideology among Brazilian programmers and technicians. Once again, these ideas interpreted through the Brazilian context as left-wing

political activists began to champion FOSS as a technological antidote to neoliberal globalization.

In retrospect, Professor Sergio Amadeu's impassioned call in 2009 to defend the *Internet Livre* at a FOSS conference in Porto Alegre highlights the mutually constitutive relationship between FOSS and the global Internet. Furthermore, given his long-time militancy within the PT, Amadeu's speech also shed light on how, in Brazil, notions of openness, collaboration, and participation, which were central to the "hacker ethic," were reinterpreted and incorporated into a larger political project that promoted participatory democracy and challenged neoliberal globalization. In this way, his call for an *Internet livre* is part of a larger trend among Brazilian activists to promote an alternative, counter-hegemonic technological future.

In the following chapters, I explore the ways Brazilian Internet freedom activists have shaped state Internet policy by applying FOSS ideologies of collaboration to create new mechanisms of citizen participation. Indeed, some of the same individuals highlighted in this chapter have led these efforts, such as spearheading the creation of the Internet freedom bill the *Marco Civil da Internet* and creating participatory channels within the structure of the Brazilian Internet Steering Committee. I argue that for these individuals, particularly for the FOSS activists, attempts to create new mechanisms of democratic participation which are collaborative, open, and decentralized represent an application of the "hacker ethic" to state governance.

CHAPTER 3

HACKING THE STATE – THE BRAZILIAN *MARCO CIVIL DA INTERNET*

On April 23rd 2014, Brazilian President Dilma Rousseff signed into law the pioneering Internet freedom bill the *Marco Civil da Internet* (MCI), commonly referred to in English as, the "Civil Rights Framework for the Internet." She did so in front of an international audience at the global Internet governance conference, NetMundial, held in São Paulo. At the time of the law's passing, Brazilian Internet freedom activists had been working for more than five years to help establish a digital rights law that "establishes principles, guarantees, rights, and responsibilities for the use of the Internet in Brazil" (Marco Civil da Internet, Lei nº 12.965 2014), as the law's first article states. The law had three key policies that addressed the concerns of Internet freedom activists: 1) It safeguarded user privacy by placing restrictions on corporations and the government from maintaining indefinite browsing history logs; 2) It mandated a judicial review of requests to remove potentially offensive or illegal material, including content an individual or corporation claimed infringed copyright; and 3) It mandated net neutrality – a technical policy that prohibits restricting *or* fast-tracking the flow of information on the Internet for commercial purposes. Brazilian activists considered the passage of this law in 2014 as one of their biggest victories and an example for activists in other countries to replicate.

Indeed, the law gained global attention. Tim Berners-Lee, the man often referred to as the "Father of the World Wide Web" for his role in creating HTML in the 1990s, publicly stated that the law "reflects the Internet as it should be: an open, neutral and decentralized network, in which users are the engine of collaboration and innovation… the [law] has among its foundations the guarantee of human rights such as privacy, of citizenship and the preservation of the diversity and the social purpose of the web" (World Wide Web Foundation 2014). For Berners-Lee, these policies created a legal framework that empowers citizens and encourages democratic participation. In fact, he has called for a global *Magna Carta* on Internet rights, which would be largely inspired by the Brazilian law.

The *Marco Civil da Internet* is also important in that it represented one of the most high-profile experiments worldwide, in what Brazilian Internet freedom activists referred to as *governo aberto* – which can be glossed in to English as either open or open-source government. By using the term *governo aberto,* activists were talking about initiatives that sought to use the Internet to increase citizen participation in democratic decision-making by opening up the process to a broader spectrum of society and making it more transparent. At the behest of Internet freedom activists, the language of the MCI was drafted via a government website that allowed individual citizens and organizations (e.g., NGOs, businesses, political parties, etc.) to interact and debate the law's contents. This open, interactive, and collaborative process was inspired by the methods that hackers pioneered to develop FOSS via virtual, online communities in the 1990s. It relied on a belief that the collective intelligence employed in this process improved the final product and resulted in one that was less beholden to powerful corporate lobbies. Because the process of drafting the MCI was transparent and markedly different than the traditional method of drafting bills "behind closed doors," activists proudly referred to this as the "hacking" of the legislative

process.[11] Thus, for activists, the MCI represented the application of a FOSS philosophy to the democratic process.

The case of the MCI raises questions about the possibility of new mechanisms of citizen participation facilitated by the Internet to lead to a more socially just policy. The notion that the spread of the Internet and related digital technologies will inherently strengthen democracy emerged in 1990s when the Internet began reaching mass publics in North America and Europe. A number of scholars and public intellectuals asserted that the "digital revolution" ushered in by new information technology would fundamentally reshape the world in a positive way as the world transitioned from an industrial-based economy to one based on information (Benkler 2006; Castells 2000). The general argument of these Internet celebrants revolved around the belief that the Internet was "broadening the public sphere, increasing political participation, involving citizens in political activities that were previously closed to them, and challenging the monopoly of traditional elites" and would thus strengthen democracy (Hindman 2009:6). For proponents of these ideas, the Internet would empower citizens and pave the way for more socially equitable public policy. This conviction translated into so-called *digital democracy* initiatives that used social media and Internet websites to help develop public policy. This included experiments like the Obama administration's *We the People* website launched in 2009 that allowed US social media users to collectively petition the White House and the government of Iceland's attempt to crowd source a new constitution in 2011. A facile analysis of the MCI might interpret the passage and signing of the law as evidence of the effectiveness of *digital democracy* mechanisms. However, upon closer inspection, I argue that chalking this victory up to the power of digital mechanisms of participation is overly simplistic and misses the political battles that actually shaped how the law came into being, which will be the focus of my analysis in this chapter and the next.

In *The Myth of Digital Democracy*, political scientist Daniel Hindman (2009) argues that the initial hope of the Internet as an innately democratizing force has not been substantiated by real world experience. He contends that online filtering and gatekeeping practices, often by commercial websites and search engines, mean that people may be given a place to speak, but this does not necessarily mean that their opinions are being taken into account by elite policy makers. For him, the "difference between speaking and being heard" is fundamental when thinking about the democratizing power of the Internet (Hindman 2009:12–13). Media scholar Robert McChesney, who has written about how global capitalism poses a threat to the Internet, argues that the Internet celebrants mistakenly believed that "digital technology [had] superpowers over political economy" (McChesney 2013:15). McChesney contends that they largely ignored the political realities of contemporary neoliberal capitalism, which was not trending towards greater redistribution and broader political participation in the wake of major technological innovations. In contrast, Brazilian Internet freedom activists are not naïve about how technology is entangled with the broader political economy. No one I spoke with subscribed to the cyber-utopian notion that the Internet itself would necessarily lead to more democratic and socially just society. Rather, their political trajectories and beliefs demonstrate a conviction that neoliberal

[11] The term hack in this case does not refer to committing a crime using digital technology, but rather it invokes the original meaning developed by computer programmers in the 1960s in which a hack refers to generating a clever fix to a technical problem.

policies are circumscribing public debate. In fact, for many of them the MCI is just one component of larger political efforts to create a more equitable society. From this perspective, the Internet is not a cure-all for global injustice, but rather the most recent vehicle for broader discussions about how and for whom society is organized.

While using the Internet to foster democratic participation was not unique to Brazil, I contend that it gained support among Brazilian activists because in Brazil it is perceived as part of a larger push to promote participatory democracy and reshape state power. The unique significance of *governo aberto* in the Brazilian context can be understood through the words of Marcelo Branco, the longtime FOSS activist and PT militant from Porto Alegre who helped start FISL in 2000 and who has been a longtime proponent of *governo aberto* initiatives. In a blog post titled *Governo aberto não é governo eletrônico* (Open government is not electronic government), he concisely summed up the key elements of *governo aberto* initiatives in this way:

> *Governo aberto*, in concept, refers to new, interactive, and participatory practices so that the population, in a collaborative way, can participate in the construction of public policies using social media as a platform…*governo aberto* should alter the status quo and the functioning of the administrative apparatus, empowering individuals, questioning the limits of representative democracy, and creating new channels for participation and the making of decisions using social media and the Internet (Branco 2014).

For Branco, the goal of *governo aberto* then was not to simply employ digital technologies to make governing more efficient or more transparent, but rather to fundamentally alter the governance process itself. In theory, increased citizen participation effectively diminishes the power of legislators and civil servants in crafting state policy, and thus ultimately represents an endeavor to reshape the configuration of state power. The focus on citizen empowerment and participation harkens back to other participatory democracy initiatives, like experiments with participatory budgeting that began in Porto Alegre in early the 1990s and which Branco advocated for as a local PT militant (Abers 1996; Avritzer 2007; Baiocchi 2005; Santos 1998). While the topics being debated and the mechanisms used for discussion were different, the same underlying goals to increase citizen participation in democratic governance remained in the case of crafting the MCI.

In this chapter, I explore the role of Brazilian Internet freedom activists in creating the MCI. I show how their practices, values, and goals were fundamentally shaped by the legacy of the Brazilian redemocratization process and efforts to promote participatory democracy. This is evident in three ways. First, activists discursively linked attempts to monitor and censor Internet usage to the censorship practices of the Brazilian military dictatorship. Second, activists made demands upon the state to enumerate the rights of citizens in relation to the Internet by calling for the creation of an Internet rights bill. This differed from the approach of Internet freedom activists who up until then eschewed state intervention in Internet governance, and the fact that this tactic gained purchase in Brazil is indicative of more widespread opposition to neoliberalism in Brazil. And third, activists employed an interactive, collaborative website to draft the bill's language in an attempt to foster new channels of citizen participation in the law-making process. I draw on literature about Brazilian redemocratization and participatory democracy in order to suggest that these

characteristics are distinctive to Brazilian socio-political context (Abers 1996; Baiocchi 2005; Holston 2009; Keck 1995; Santos and Avritzer 2007). Ultimately, I argue that the "hacking" of the legislation drafting process created openings that allowed activists to push their policy agenda by participating in the writing of legislation. The employment of *governo aberto* in this case represents a tactic by which Brazilian Internet freedom activists were able to leverage, albeit temporarily, more influence over state power. I conclude with a brief discussion about the shortcomings of this experiment with *governo aberto* in terms of its failure to directly result in structural changes in the exercise of state power. In this way, the practice of participatory democracy did not immediately fulfill the expectations of its proponents.

Counter-hegemonic Technological Visions: Intellectual Property and the Internet

When I watched FOSS activist Sergio Amadeu give his passionate lecture at the free software conference FISL in 2011 warning young hackers about emerging legislation that threatened an *Internet livre*, he focused mainly on new laws being proposed or passed abroad that would have negative impacts on Internet users globally. However, just a couple years earlier, the target of his criticism in speeches at technology conferences and on his personal blog was not any foreign law, but rather a Brazilian cybercrimes bill being debated in the Brazilian senate. The so-called *Lei Azeredo* – Azeredo's Law – was the consolidation of a number of previous, smaller cybercrimes bills and was introduced by center-right senator Eduardo Azeredo (PSDB), whose party supported economic liberalization policies associated with neoliberal thought.[12] The language of *Lei Azeredo* was heavily influenced by the 2001 Budapest Convention on Cybercrimes, which sought to create a global legal structure for combatting copyright infringement, digital piracy, child pornography, international terrorism, and network security. It also drew heavily from the US's Digital Millennium Copyright Act (DMCA) of 1998, which strengthened copyright protections on the Internet by criminalizing not only the sharing of copyrighted material, but also the creation of technology (hardware and software) that could *potentially* be used to share content. Azeredo's goal was to harmonize Brazilian law with US and European laws, which he argued would be good for global information technology companies, and would therefore promote private investment and technological development in Brazil. Azeredo had experience in IT as he was trained as an analyst at IBM in the 1970s and had led a number of Brazilian state informatics corporations (i.e., SERPRO, Prodemge, Prodabel) during his political career. Azeredo's bill attempted to restrict the free circulation of knowledge on the Internet and was part of a larger global intellectual property enforcement regime being erected by supporters of neoliberal globalization (Souza, Solagna, and Leal 2014).

For Professor Amadeu, the policies in *Lei Azeredo* were anathema to the type of *Internet livre* he championed, which was characterized by collaboration, sharing, and freedom of expression. As such, Amadeu actively organized fellow bloggers, techies, and left-wing activists to defeat the bill. In order to understand both his perspective and the weight of his opinions among activist techies, it is important to understand his political background. I spoke with him at the sidelines of the technology conference, *Conexões*

[12] Azeredo was a founding member of the Partido da Social Democracia Brasileira (PSDB), a center-right party formed by individuals who had opposed the military dictatorship and who advocated for policies of economic liberalism. He was first elected mayor of Belo Horizonte (1990-1992), then governor of Minas Gerais (1995-1999), before ultimately entering the Senate in 2003.

Globais, in 2013 prior to the signing of the MCI. The following analysis of his background is augmented by other public interviews Amadeu has given. Amadeu's story illustrates how current struggles over privacy and freedom of expression on the Internet in Brazil are shaped by the activists' experiences of the Brazilian military dictatorship (1964-1985) and the country's recent redemocratization process.

Amadeu first became politically engaged with radical pro-democracy activism as a young, middle class high school student in the city of São Paulo in the early 1980s. He joined other student activists in reestablishing the *União Brasileira dos Estudantes Secundaristas* – the Brazilian Union of Secondary Students, or UBES – a national high school student organization linked to the university student movement and left-wing organizations. The organization had been essentially outlawed in 1968 as the result of *Ato Institucional #5* (Institutional Act #5, or simply AI-5), which closed Congress, suspended habeas corpus, and instituted a strict regime of media censorship. This act essentially put an end to student organizing and legal political opposition and ushered in an era of violent repression. Amadeu was central to the re-formation of UBES in 1981 and was elected national UBES president at the organization's national congress in Curitiba that year. The military government did not approve of the re-formation of UBES and for this, Amadeu was briefly jailed for his actions. For Amadeu, "the secondary school movement…was a movement for democracy…the movement fought for democracy in the country and within the schools" (CESPI 2012). The specific demands of UBES under Amadeu's leadership included increased enrollment at public universities, more funds for public education, and a less authoritarian treatment of students in the classroom. However, what drove Amadeu and many others of his fellow student activists was a desire for the country to return to democratic, civilian rule.

After leaving the UBES presidency, he remained very active in the left-wing, pro-democracy youth movement in São Paulo. He joined the PT in 1984 during the *Diretas Já* (Direct Elections Now!) movement in which millions of Brazilians took to the streets to demand the return of direct presidential elections. Amadeu became an active militant in the party structure. In the 1980s and 1990s he worked in the PT's São Paulo offices, at which time he developed ties with the upper-echelons of PT leadership, including José Dirceu, one of Lula da Silva's closest confidants and future chief of staff. It was in this political milieu of overlapping trade unionism and left-wing student activism that notions of participatory democracy and movements against neoliberal globalization were taking shape.

Amadeu's engagement with technology and the Internet began in earnest in the mid-1990s when he was pursuing his master's degree in sociology at the Universidade de São Paulo (USP). He had started to use email and was a heavy user of bulletin board services (BBS). This sparked an interest in the effects of the Internet on nation-state sovereignty, which would become the topic of his master's thesis, *Poder no Ciberespaço - O Estado-Nação, a regulamentação e o controle da Internet* (Power in Cyberspace – The Nation-State, regulation, and control of the Internet). In his thesis, he critiqued the "myth of the global democracy of the network" and argued that despite the anarchistic origins, US government agencies "define the domains, protocols, and architecture of the Internet" (Amadeu da Silveira 2000). In our interview more than a decade later, he summed up his argument this way: "Who controls the infrastructure, controls the Internet – it's geographical and it is owned." While researching the history of the Internet, Amadeu became more familiar with FOSS. He was particularly drawn to the way that the FOSS model challenged corporate power and created new, collaborative mechanisms for knowledge production. For him, the

ability to control the source code represented power and autonomy, particularly from large informatics corporations based mainly in the Global North. He quickly became a vocal advocate for the adoption of FOSS in São Paulo and within the party structure of the PT. In 2001, he was appointed by the mayor of São Paulo, Marta Suplicy (PT) to run a digital inclusion initiative in the city. This led to the creation of the largest network of *telecentros* – public computer labs located primarily in poor communities with little access to technology– that were operated using FOSS at Amadeu's insistence. In this high-level position in the government of the largest city in Brazil, Amadeu became one of the PT's most vocal advocates for an alternative technology policy centered around FOSS, which he argued would lead to greater social inclusion of poor people and increased Brazilian innovation. It was during these years that he began to frequent the FISL and emerged as one of the central figures of the Brazilian FOSS movement.

In 2003, he was approached by newly elected President, Lula da Silva (PT), to take charge of the *Instituto Nacional de Tecnologia de Informação* (ITI), the federal agency entrusted with the government's cryptographic codes and encryption technology. With Lula's consent, however, Amadeu pursued a different agenda. He used this new institutional platform to lead a charge to transition government computers away from expensive proprietary software purchased from multinational corporations to FOSS. Through his leadership at ITI, Amadeu gained global attention as he, in essence, became the spokesperson for an alternative vision of technological development through FOSS. At the time, he articulated his support for FOSS this way:

> We are not opting for a product, we are opting for a software-use development model. This is a political decision, and I cannot emphasize this enough, based on an economic reason -- a reduction in the remittance of royalties. It also expands Brazil's technological autonomy and strengthens our collective intelligence (Amadeu cited in Cadina 2004).

Known for his fiery rhetoric, Amadeu was famously sued by Microsoft for defamation, when, in a public speech he compared the company's practice of giving away free trials of its operating software, Windows, to the tactics of a drug-dealer trying to push a drug. In 2005, Amadeu left ITI after a strong pushback from the proprietary software industry stalled Brazilian government adoption of FOSS, and Amadeu felt his work had been stymied by bureaucratic foot dragging (Shaw 2011). Amadeu returned to academia as a professor at the *Universidade do ABC* (UFABC) in the state of São Paulo. Despite no longer having a high-level government position, he was still widely regarded as one of the most influential thinkers in the area of technology policy within the PT. His blog, *Blog do Sergio Amadeu,* where he discussed issues related to software, intellectual property, and the Internet became one of the most highly read among technologists. Leaving government liberated Amadeu to become a sharper, more outspoken critic of policies with which he disagreed. One such technology policy proposal he opposed was *Lei Azeredo*, which became one of Amadeu's main targets. Amadeu would find more allies in this process, particularly from the growing community of bloggers and individuals with social media accounts.

Opposition Mounts Online in the Blogosphere: *AI-5 Digital* and the Digital Dictatorship

Senator Azeredo first introduced his cybercrimes bill in 2003, but it lingered, largely unnoticed, until November 2006 when Azeredo altered the bill's language. This new language in *Lei Azeredo* mandated the registration of all Internet users in Brazil and required that Internet service providers store and monitor all data communications passing through their networks. Azeredo argued that increased monitoring of Internet users would decrease digital piracy of intellectual property, which he claimed was costing corporations billions of dollars in profit each year. He contended that the bill needed to be passed urgently because of the quick pace of technological change and the threat that an unregulated Internet posed to Brazilian society (Renná da Silva Santarém 2011). The draconian nature of the bill started raising alarms, particularly among Brazilian bloggers. Their concern was that the bill was written so vaguely that many of their practices, including sharing links to content on their blog, could potentially be deemed criminal. Indeed, the digital copyright components of the bill effectively criminalized the daily actions of many Internet users who shared files (music, videos, etc.) on peer-to-peer (P2P) networks. The law was written so imprecisely that young legal scholar and technology expert Ronaldo Lemos argued it could be interpreted to potentially ban the public transmission of television signals, something which the bill's author had clearly not intended (Lemos 2007). The threat of corporate control of intellectual property was something that Sergio Amadeu had been warning people about for years through his FOSS activism, but now that the corporate target was perceived as the Internet, broader swaths of Brazilian society became involved.

One blogger who rose to prominence during this time was João Carlos Caribé, a freelance digital marketer from Rio de Janeiro who maintained an active blog called *Entropia!*. He has since become one of the most outspoken proponents of Internet freedom and travels around the world to technology and international policy conferences to deliver his message. I spoke with him at the sidelines of FISL in 2012. Caribé first became enamored with the possibilities of the Internet when he started logging on in the late 1990s when commercial Internet was becoming available to the public in Brazil. While surfing the Internet, he discovered and became proficient in Flash—a proprietary multimedia software used for creating graphics and animation for websites. He eventually turned his knowledge of the software into a successful career doing online marketing and consulting with his business, *Flash Brasil*. Up until this point in his life, Caribé had not been actively engaged in politics. As a small-business owner, he typically voted for center-right, pro-business candidates, but he was not a political militant of any party. In April 2005, he started his blog, *Entropia!*, and began using the Internet as a platform to publish his ideas and opinions. The topics of his blog posts spanned the gamut from successful marketing methods to strategies for combating endemic Brazilian political corruption. Thus, in addition to seeing the Internet as opening creative and economic opportunities, he also saw it as an important mechanism for civic engagement. As such, over time, his posts became increasingly political.

Caribé become active in an online community called *Cibercultura* on the now defunct social media site Orkut, which was owned by Google and was the most popular social media site in Brazil at the time. The *Cibercultura* group was a large community of Brazilian social media users who discussed how technology was changing cultural practices, such as artistic creation, social relationships, and entrepreneurship. Many were inspired by new ideas about what they referred to as *cibercultura* or *cultura digital* – cyber culture or digital culture. At the heart of these ideas were notions borrowed from computer hackers about sharing,

collaboration, and decentralization. Extending from the hacking ethos of the Internet pioneers, these ideas were now being applied more broadly to culture in all of its forms. This movement was often referred to as the free culture movement, and it was inspired by the work of American legal scholar Lawrence Lessig, who had coined the term "free culture" (2004). As an active member of this group, Caribé become more familiar with the arguments made by FOSS activists about the danger of neoliberal corporate enclosure of intellectual property. While Caribé would never completely give up proprietary software, he became a supporter of FOSS activism and was skeptical of neoliberal policies, which he now considered dangerous to innovation and freedom of expression.

Figure 1. *Cibercultura* community on Orkut

Screenshot of front page of the now off-line *Cibercultura* community. Photo courtesy João Carlos Caribé.

In 2006, when news of changes to the *Lei Azeredo* were announced, Caribé was alarmed because he felt that the monitoring of Internet users was a way for politicians to scare independent bloggers, like himself, from publishing their critiques. For him, as a blogger, the law was primarily about freedom of expression initially, and had less to do with Amadeu's concerns about corporate enclosure of knowledge. Caribé used the *Cibercultura* group as a platform to organize fellow bloggers and warn them of the potential dangers of the law. He created a blog specifically to post about issues related to freedom of expression called *Xô Censura* (Out Censorship). The first published post appeared on November 7, 2006, the day before the bill was going to be debated in Congress in Brasília:

> Tomorrow . . . may become known as the day the Internet died in Brazil, because a bill by Senator Eduardo Azeredo will be voted on that institutes *cartorização* [excessive file keeping] of Internet access, all we do will be registered, beginning with our data, webpages we access, exchanged files, e-mails, all for five years with the Internet service provider. Cyber cafés and universities will be required to keep

> records and who fails to comply with this absurd law could be imprisoned for up to four years . . . It is necessary that each of us do something to curb these aberrations that are going to censor our Internet . . . The Internet as we know it may be near the end. We run a serious risk of a setback. This setback is only of interest to a powerful minority (Caribé 2006).

Caribé's reference to the "powerful minority" behind the bill demonstrates his belief that it would not benefit the majority of Brazilians. His fear did not come to pass as the bill remained in committee for discussion the following day and no action was taken. Nonetheless, the danger of the bill remained and Caribé continued keeping his fellow bloggers up to date on news of the bill's progress in Brasília. This eventually led to the creation of another website called *MegaNão! Diga Não ao Vigilantismo! (*MegaNo! Say no to Surveillance) whose objective was to serve as the digital hub of the growing movement to defeat the bill. Caribé and others would often refer to the efforts to stop the *Lei Azeredo* as *movimento MegaNão*.

Despite setbacks in Brasília, Senator Azeredo continued to push for his bill as it slowly worked its way through the various Senate committees that claimed jurisdiction over its various components. The fact that it persisted was alarming to activists. In particular, Amadeu was concerned about why there was not any formal opposition from Lula's administration. In July 2008, Amadeu published on his blog the *Manifesto em Defesa da Liberdade do Progresso do Conhecimento na Internet Brasileira* (Manifesto in Defense of Liberty of Progress of Knowledge on the Brazilian Internet). In this essay, he argued against the *Lei Azeredo* and gave a long defense of the liberatory potential of the Internet, reproduced, in part, below:

> The Internet has expanded in an unprecedented way human communication, enabling a planetary breakthrough in the way we produce, distribute and consume knowledge, whether written, visual, or audible. Built collaboratively, networking is one of the greatest expressions of cultural diversity and social creativity of the twentieth century. Decentralized, the Internet is based on interactivity and the possibility for all to become producers and not just consumers of information, as was the case in the era of mass media. On the Internet, the freedom of creating content feeds and is fed by the freedom of creating new media formats, new programs, new technologies, new social networks. Freedom is the basis of knowledge creation. And it underpins the development and survival of the Internet
>
> We need to grow the network, not lock it down. We need access for all Brazilians and to stimulate their production of knowledge, culture, and with this improvement of their living conditions . . . Projects like [*Lei Azeredo*] do a disservice to society and Brazilian culture, they block human development and put the country at a disadvantage in the information age of the 21st century (Amadeu da Silveira 2008).

In the manifesto, Amadeu explicitly linked freedom and the continued survival of an *Internet livre*. He concluded the manifesto by calling for the defeat of the *Lei Azeredo* because the bill was "against liberty, creativity, privacy, and the dissemination of knowledge on the Brazilian Internet" (Amadeu da Silveira 2008). For Amadeu, a cybercrimes bill that restricted Internet

usage in severe ways would be a fundamental threat to freedom and the democratic system. Shortly after its publication Caribé, with Amadeu's permission, turned the manifesto into an online public petition on the global website Petition Online. In a matter of days it gained over 30,000 signatories from individuals and organizations in Brazil and around the world, and it would eventually gain over 150,000 signers. Its popularity online garnered widespread attention in the mainstream newspapers (Renã da Silva Santarém 2011:74–76). This news coverage marked the first time that wide-scale attention would be focused on the bill.

Towards the end of 2008, activists began to make more explicit the discursive connections between Internet censorship and dictatorship. In November at a public hearing in Brasília at the national congress, while Amadeu spoke of his opposition to the law, activists in the audience symbolically taped their mouths shut and held up signs that said *Quem derrotou a ditatura não aceita o vigilantismo* ("Those who defeated the dictatorship do not accept surveillance"). The Internet was a new platform for creative and civic engagement; anyone trying to restrict it was seen as replicating the repressive values of the Brazilian military dictatorship. A month later, in December 2008, Internet freedom activists including Amadeu and Caribé began referring to the *Lei Azeredo* as *AI-5 Digital*. The term refers to the *Ato Institucional #5 (AI-5)* (Renã da Silva Santarém 2011:80). For activists, the bill was the digital equivalent of the repressive decree of 1968 that violently repressed political dissent. This was because in their opinion it would stifle freedom of expression and result in government monitoring of Internet use. This framing of the law helped activists break through to the public. This language helped translate the effects of the cybercrimes law to an audience that might not fully understand the effects of Internet policies on their daily lives, but that still had vivid memories of the dictatorship. This framing relied on popular Brazilian opposition to the military regime to marshal support for Internet freedom. It also put political parties on notice. Both Azeredo's center-right PSDB and the PT had emerged out of the opposition to the military regime. The fact that the parties emerged out of democratic opposition to the dictatorship is something that members of both parties often invoked to burnish their democratic bonafides. Now activists were calling upon both parties to decide which side they were on in the digital age. Did they support the so-called *AI-5 Digital* or were they against it?

Figure 2. ***MegaNão*** **poster announcing an activist meeting to oppose** ***Lei Azeredo.***

The Fight for Rights Goes Digital: The *Marco Civil da Internet*

At the same time as individuals like Amadeu and Caribé were equating the cybercrimes bill to the repressive Brazilian military dictatorship, a new discourse also emerged about citizen rights to the Internet. Demanding citizen rights was one of the hallmarks of pro-democracy efforts that emanated from the urban peripheries in the 1980s as the poor and working classes sought to be accepted as full citizens in the emerging Brazilian democracy (Dagnino 2007; Holston 2009). In the 2000s, Internet freedom activists were demanding rights specifically related to the access and use of the Internet. This shift was linked to an increasing desire not to resist government regulation of the Internet altogether, but rather to help shape it so that it could attend to the demands of Internet freedom activists. Brazilian activists wanted the government to support the regulation of the Internet to insure its free and open nature, thus legalizing the activist vision of an *Internet livre*.

Ronaldo Lemos, a young legal scholar in Rio de Janeiro, was one of the central figures in inverting the debate from one of crime to civil rights. In the mid-2000s, he was the director of the *Centro de Tecnologia e Sociedade* (Center for Technology and Society or CTS) in Rio de Janeiro, which he helped found in 2003. At the time, it was the only Brazilian think tank dedicated solely to technology issues. Lemos had first become interested in Internet policy issues in the late 1990s when he was working as a telecommunications lawyer for a large Brazilian corporate firm. This interest led him to return to school and pursue a master's degree at Harvard Law School, which was already well known as a place where progressive legal scholars were generating ideas about how to create a legal framework that would spur innovation and creativity in the digital age. Principal among the progressive legal scholars at Harvard was professor Lawrence Lessig who was at the school's Berkman Center for Internet and Society. Lessig was a leader of the free culture movement and had helped found the Creative Commons initiative in 2001. Inspired by what he saw during his time at Harvard, Lemos returned to Brazil and took up a position as professor of law at the *Fundação Getúlio Vargas* law school where he launched the *Centro de Tecnologia e Sociedade,* which grew as Lemos attracted a number of students interested in the same issues. Lemos's research at the center focused on how new technologies, particularly the Internet, were giving life to a digital commons of intellectual property, and how this served as a catalyst for creative engagement and innovation. Lemos was most widely known for his leading role helping to launch a Brazilian affiliate of the Creative Commons project, which was inspired by the FOSS licenses and created new copyright licenses for creative works (music, art, literature, etc.). Creative Commons Brasil was launched at FISL in Porto Alegre in 2004. Lemos was media savvy and, in addition to being widely published in newspapers, he often appeared on television on the Globo network and had even produced a television series for MTV Brasil. As a public intellectual, Lemos raised issues about digital policy and law to broader audiences and he also inspired a younger generation of lawyers to become more actively engaged in debating these issues.

In a May 2007 opinion piece published on UOL Notícias, an online news site owned by Globo, Lemos argued that rather than first creating a penal law like *Lei Azeredo* that criminalized behavior on the Internet, legislators should instead pass a law that regulated the use of the Internet from a civil law perspective (Lemos 2007). He contended, that unlike in the US and other Latin American countries, in Brazil there was no law on the books that specifically dealt with the Internet. This meant that the first Brazilian law that referenced the Internet would be a criminal one if *Lei Azeredo* were the first to pass. For Lemos, it was

illogical to pass a bill telling people what they could not do on the Internet without first laying the groundwork for what was permissible. His opinion piece ended on this note:

> All the effort of the public debate around such a bill [*Lei Azeredo*], which aims to regulate the Internet from a criminal point of view, should instead be focused on the civil regulation of the Internet, clearly defining their regulatory framework and favoring innovation, as it was in developed countries. Favoring the criminal regulation of the Internet before its civil legislation has the effect of increasing public and private costs, disincentivizing innovation and above all, ineffectiveness. In this sense, we must first start with civil legislation, and then propose criminal measures that can improve its effectiveness, without burdening the society as a whole, as the current bill by Senator Eduardo Azeredo does (Lemos 2007).

Lemos argued that rather than creating a penal law, Brazil should first pass a *marco regulatório civil* – a civil rights framework that regulated the use of the Internet. The call to have the state regulate Internet use via legislation was important because it differed from previous libertarian arguments popular among some Internet freedom activists in the US that governments should not regulate the Internet in any way. This philosophy was encapsulated in John Perry Barlow's cyber-libertarian manifesto, "A Declaration of the Independence of Cyberspace," which he wrote in opposition to the passage of the US Telecommunications Act of 1996, the first US law to deal with the Internet policy. Lemos was arguing that the Internet did, in fact, need regulations in order to function most effectively. This represented an inversion of tactics among Internet freedom activists from rhetorically rejecting any state intervention in Internet policy, to calling for the state to be a protector of an open Internet through beneficial legislation. This demonstrates how Brazilian activists chose a more state-interventionist Internet policy than their counterparts in the Global North.

While in the opinion piece Lemos did not specifically mention the Internet as a right, his call for civil rights framework revealed his underlying assumption that access to the Internet should be considered a human right. The strategy to focus on creating a legal framework of Internet rights was a strategy that had not been used by Internet freedom activists in other places around the world. Yet, it quickly gained support in Brazil. In my interview with him, he explained it this way:

> My idea came from the fact that first you regulate something from the civil law perspective, and then you regulate from the criminal perspective. I do believe that criminal law is the last resource, the last instance that you want to regulate. First you regulate civil, and then you regulate criminal. And that idea resonated. People said "Wow, that's correct!" … And then the idea of the *Marco Civil* [da Internet] emerged.

As activists railed against the *Lei Azeredo*, they increasingly invoked the specific demand to create a law that would guarantee citizen rights on the Internet – a *Marco Civil da Internet*.

Also, important to note is that Lemos couched his critique of the *Lei Azeredo* in terms of its effects on innovation and entrepreneurship. Whereas Amadeu and Caribé focused their attacks on the way that the *Lei Azeredo* stifled freedom of expression and could lead to government surveillance, Lemos emphasized that the restrictions on sharing would have

negative effects on the creative industries. He contended that the vague nature of the bill's language would criminalize practices of sharing that should actually be encouraged and that were the basis for creative innovation. In this way, in Lemos's opinion, the law would stifle creativity and be bad for the creative Brazilian entrepreneurs, particularly musicians, filmmakers, and artists. He said that a cybercrimes law would "elevate the cost of investment in the sector and stifle the creation of private, public, and business initiatives in the area" (Lemos 2007). These arguments about innovation mirror those by Lessig and others who criticize increasingly strict intellectual property regimes worldwide which they contend benefit large corporations, but actually stifle overall creativity by "locking down culture" (Lessig 2004). For Lemos, the central argument for creating a *Marco Civil* was to create a legal framework that would be a catalyst for Brazilian innovation. The slight divergence between the initial arguments of Lemos and Amadeu and Caribé illustrates differing concerns among different groups of Internet freedom activists.

The need for some type of Brazilian government guidance about the Internet was becoming clearer as a series of judicial rulings showed that judges were taking actions that raised alarm among Internet users. In one case a judge ordered the entire YouTube website be taken offline until one compromising video of a famous female actress was pulled from the website – something that YouTube refused to do because it argued the video was stored in a data center outside of Brazil and was thus outside the judge's jurisdiction. At this time, the Brazilian Internet Steering Committee also began working on its own document called the *Decálogo*, or ten commandments, that was meant to guide politicians and judges in terms of Internet policy, which I will analyze in greater detail in Chapter 5. Thus, the desire for the MCI was not only about securing a citizen's rights in regards to accessing the Internet, but also about giving clarity to the judicial branch in terms of how to apply standing law to the Internet.

FOSS Activist Mobilization at FISL: Lobbying Lula

The movement against the law was not merely virtual. While efforts like the online petition demonstrated what activists often refer to as *a força da rede* – the power of the network – in terms of shaping public debate, activists were never under the impression that actions online could by themselves effect change. Employing tactics from social movements, activists organized public roundtables with sympathetic legislators and political flash mobs to gain attention in the press and on social media. Arguably the most important of activist activities were the organization and participation in progressive technology events like FISL and *Campus Party Brasil*, whose organizers were themselves Internet freedom activists. These forums provided a space for leaders like Amadeu, Caribé, and Lemos to articulate their issues with the law to conference participants. It was also a place for activists to directly challenge the politicians and policymakers who often made appearances at the debate roundtables. For example, at *Campus Party Brasil* in January 2009, an advisor to Senator Azeredo sat on a panel with two of the bill's biggest critics - Amadeu and Lemos. Activists in the audience expressed their opposition to the bill by holding their computer laptop screens toward the stage with slogans against the bill or simply turned their backs to the Senator's representative (Rená da Silva Santarém 2011:81–81). While none of these events or encounters changed Azeredo's position, a subsequent encounter between Internet freedom activists and President Lula da Silva would demonstrate the enduring power of the Brazilian

FOSS movement to influence state technology policy. It would also show how traditional forms of political organizing were essential for the ultimate elaboration of the MCI.

In 2009 Marcelo Branco, one of the original organizers of FISL, took on the responsibility of organizing the event's 10th anniversary in July of that year. Branco and other activists decided to use the gathering as a moment to celebrate their success at making Brazil one of the leaders in FOSS promotion worldwide over the previous decade. In large part, the success of the Brazilian FOSS movement was due to their ability to convince the government to embrace their technological movement when Lula become president in 2003. Branco, who was well connected within the PT because of his long-term militancy within the party going back to the early 1980s, was able to leverage his political connections to secure the presence of the president at the conference. Notable among these connections was Cezar Alvarez, Lula's coordinator of digital inclusion projects. Alvarez was a PT militant from Rio Grande do Sul who had worked in the three PT mayoral administrations in Porto Alegre before taking a position in the federal government. Branco leaned heavily on contacts in the government and these party connections were essential to securing Lula's attendance. In an interview in the summer of 2013, Branco told me that the activists' goal at the event was to get some type of official document or official decree that would acknowledge the contribution of the Brazilian FOSS movement in generating an alternative technology policy. Lula's attendance at the conference would provide activists the opportunity to directly engage in political debate with influential party leaders.

When the announcement was made that Lula would participate at FISL, activists became energized and anticipation of the event grew. It demonstrated the power of activists to command the attention of the government. The conference was shaping up to be one of the largest and most high profile FISLs ever. His presence meant that activists would have a chance to directly express their appreciation to Lula, but also to address their concerns about the ways that the government's FOSS agenda had fallen short. More importantly, while activists were still lobbying to have FOSS more widely promoted by the government, the topic that FOSS activists were currently most concerned about was Internet freedom and the cybercrimes bill *Lei Azeredo*. They understood the bill to be a direct attack on their philosophy of the free sharing of knowledge.

On July 26, 2009, President Lula da Silva and his then chief of staff, Dilma Rousseff, visited FISL held at the Catholic University in Porto Alegre. The conference center was packed with thousands of participants, in large part because of Lula's presence. Branco and other FOSS activists guided Lula on a tour of the exhibition floor to meet the more than 5,000 hackers who were participating in the forum that year, which made it the most attended FISL ever. Lula was greeted like a rock star meeting his fans. As he toured the various stands and installations that touted the potential of various FOSS programs, individuals also took the time to explain their opposition to the *Lei Azeredo*. Lula admitted that he was "illiterate" in terms of the Internet and that he had given little thought to the issue. Touring the conference forced him to contemplate the issue in a way that he otherwise might not have. Hackers explained to him the concrete ways that the *Lei Azeredo* would restrict Internet freedom.

Figure 3. President Lula at FISL

Caption: Marcelo Branco (center) guides President Lula (right) and his then chief of staff Dilma Rousseff (left) through the conference showroom at FISL.

Later in the afternoon, Lula gave the keynote address to the conference. Whereas the previous speaker, his chief of staff Rousseff, had read from her prepared remarks touting government support and investment in FOSS, Lula, as was typical of his impromptu style, went off script. Instead he decided to recount how he had first come to learn about FOSS—principally from Amadeu who was also in attendance at the conference—and how FOSS represented a new model of innovation that harnessed Brazilian creativity. As he was speaking, activists unfurled a large banner in the auditorium that read *Veta Lei Azeredo* (Veto Azeredo's Law*)*. Pointing to the banner, he stated his opposition to the law:

> This law here, it does not intend to correct abuses on the Internet; it intends to censor. What we need, Tarso Genro [Minister of Justice], my friend, might be to change the Civil Code . . . What we need is to make the people who work with the digital issues, with the Internet, responsible. We need to create responsibility but not to forbid or punish.

Lula tasked his Minister of Justice Tarso Genro (PT), the former mayor of Porto Alegre who was also in attendance, to work on changing the civil code. Tasking Genro to deal with this issue, as opposed to his Minister of Communications who had close corporate ties, was important because it now became clear which Ministry had jurisdiction over this topic. Because of the president's influence over the legislators in his coalition, in the wake of Lula's pronouncement, the *Lei Azeredo*, at least in its current form, was dead in the Brazilian legislature. Likewise, his support of changes to the civil code was effectively a statement in support of Lemos' idea of a creating a *Marco Civil da Internet*, which activists like Branco had been supporting. Thus, the presence of Lula at the conference gave activists the opportunity to personally confront the president about their concerns, which directly resulted in two significant victories for defenders of Internet freedom. First, it completely halted the progress of the *Lei Azeredo* in the legislature, and secondly it launched the formal political process of drafting the *Marco Civil da Internet*.

Hacking the Legislative Process: Participatory Democracy in the Digital Age

In Brazil, laws can be drafted either by lawmakers or the executive branch, which then sends a bill to the legislature for debate. Thus, per Lula's request at FISL, it was then up

to the Ministry of Justice's *Secretaria de Assuntos Legislativos* (Office of Legislative Issues, or SAL) to draft such a bill. The president's support for the creation of the MCI created a conducive political environment for Internet freedom activists to mobilize the power of the state. This was done by activating a number of allies in government, particularly in the Ministry of Justice and the Ministry of Culture. The ministry was led by Tarso Genro, who when he was mayor of Porto Alegre (1993-1997, 2001-2003) championed participatory budgeting initiatives and had supported the use of FOSS in public administration. At SAL, three young, tech-savvy lawyers were chosen to oversee the drafting of the bill, Pedro Abramovay, Guilherme Almeida, and Paulo Rená. All three were known to be supporters of the Internet freedom movement. Abramovay, a PT militant who had been at the ministry since 2003, had actually testified alongside Amadeu and Lemos at a congressional hearing in 2008 where they discussed the problems with the *Lei Azeredo*. Thus, he was already known to be opposed to the bill and was very well versed in issues related to Internet policy. Abramovay invited his friend Almeida to work at the ministry at this time. Almeida previously had worked at a boutique law firm that specialized in intellectual property and free and open source licenses. Rená had been one of the leaders of the *Mega Não!* movement of bloggers against the cybercrimes bill. He had been working in another government job, but Almeida decided to bring him over temporarily to the Ministry of Justice to help with the drafting of the bill. He was specifically brought in for this project because he knew the issues that concerned activists. The ministry also relied on input from Lemos and his colleagues at CTS-FGV, who were some of the most well-respected legal scholars in the country with expertise on Internet policy. Thus, the individuals who would shepherd the law through the Ministry of Justice were progressive legal scholars committed to preserving Internet freedom. The final compiling of the bill's language would be done by people who were already on record as believing that an *Internet livre* was important for a vibrant democracy.

The Ministry of Culture was also important at this time because it embraced a state cultural policy that placed the democratization of technology at the core of its efforts to incentivize creativity, particularly in the urban peripheries. This was because the former minister, Gilberto Gil (Partido Verde), a world-famous Afro-Brazilian singer-songwriter who was a political exile during the dictatorship, was a longtime supporter of the free culture movement and *cultura digital* projects. These programs included free software and free culture components and were run by individuals who supported the concepts of Internet freedom. In particular, Gil himself was a longtime Internet and FOSS enthusiast. In 1996 he released the single *Pela Internet* (Via the Internet), which is an ode to the transnational, interactive nature of the new technological platform. While he was not a techie, he often referred to himself as the *Ministro Hacker* – the hacker minister – to demonstrate his endorsement of the hacker ethos, which he felt was directly applicable to creative production (Costa 2011). After Gil left the ministry in 2008, his second in command, Juca Ferreira, continued Gil's initiatives. In 2009, the ministry launched *CulturaDigital.br: Plataforma Pública de Blogs e Conversas*, an interactive website created using FOSS that mixed blogging features and social media where citizens could discuss public policies related to artistic production. A number of young Internet freedom activists, among them José Murilo, Yasodara Cordova, Daniel Prado, Lincoln Clarete, were working on this and other ministry initiatives at the time. The fact that the Ministry of Culture had been a bulwark for Internet freedom policies within the executive branch now meant that individuals at the ministry would now play a central role in shaping the *Marco Civil da Internet*.

As the lawyers at SAL and CTS began contemplating how to proceed in drafting the bill, a consensus emerged that the bill should be drafted collaboratively using an online platform that would allow individuals and groups to have a voice in the bill's language. The young PT-affiliated lawyer in charge of SAL, Abramovay, had been thinking about the possibility of using the Internet to create channels for dialogue for at least a couple years, and this seemed like the perfect time to test out such a mechanism (Solagna 2015:73). Since backing for the concept of the law gained steam via an online mobilization, it seemed only fitting that the creation of the law also take form via the same media. The idea was to debate the Internet on the Internet itself. Activists such as Amadeu, Branco, and Caribé wholeheartedly supported this *governo aberto* initiative. It would ensure that their voices and the voices of activists were heard in the drafting of the bill. Thus, the *Marco Civil da Internet* would be one of the first experiments in creating legislation this way worldwide.

No collaborative law-drafting process on this scale had ever been undertaken in Brazil, or in any other country for that matter. It was thus up to Abramovay, Almeida, and Rená at SAL to determine the best way to open up this process to the general public, while at the same time creating a document that was written using traditional Brazilian legal language that could be later presented to the legislature for debate. Thus, the individuals at the Ministry of Justice decided on a two-part process. In the first phase they would create topics for discussion based on the ideas that were brought up in the movement against the *Lei Azeredo*. After they had received this feedback, they would translate the feedback into legal language that would then be presented again on the online platform for further feedback. After they incorporated this feedback, the bill would be sent to the legislature for debate. This meant that while the input of individuals online was extremely important and would define the overall shape of the bill, the ultimate composition of the text was in the hands of a small number of individuals at the Ministry of Justice who embraced the views of Internet freedom activists and were in a position of power to craft the limits of questions that would be discussed.

The Ministry of Justice, however, had no technological platform to undertake this type of online, interactive consultation. Therefore, Almeida reached out to the Ministry of Culture because of its expertise with interactive websites. An agreement was reached between the Ministry of Justice and the Ministry of Culture to use the *CulturaDigital.br* platform for the consultation. The website already had hundreds of users who were interested in these topics and the interactive technologies that interested the lawyers at SAL. A team from the Ministry of Culture that included programmers Yasodara Cordova and Lincoln Clarete, quickly created a section of the website dedicated to debate about the *Marco Civil da Internet*. Thus, the fact that Internet freedom activists had gained a foothold in the Ministry of Culture was essential to the ability of the government to technically undertake this collaborative legislative process and to frame it in a participatory way.

The official launch of the online consultation took place in Rio de Janeiro at the *Fundação Getúlio Vargas* on October 29, 2009. A number of Brazilian government officials, including Tarso Genro and the lawyers from SAL traveled to Rio de Janeiro for a launching ceremony that would include a daylong seminar on issues related to Internet policy. At the opening ceremony, Abramovay demonstrated how this digital form of participation was perceived as being a part of a larger movement to promote forms of participatory democracy:

> We always had the dream inspired by Minister Tarso Genro to break the unilateral barrier between the state and the citizen at the moment of creating laws. Our everyday work is to write bills, make law, and we knew that we needed to find instruments to do this in a way that is not unilateral, not in the way that it has always been done. We knew that new technologies give us almost infinite possibilities to rethink our democracy . . . The construction of the law is not going to be done in an office. It is going to be done by citizens, by users of the Internet on this site that is also a space for debate about *cultura digital*. We hope that people will enter this process with the desire to construct something new because this experience could transform the way we discuss not just legislation about the Internet, but the way we discuss other bills in Brazil, and in this way, reconfigure our democracy (Marco Civil da Internet, Evento de Abertura 2009).

For Abramovay, this online consultation represented a new form of drafting legislation that relied on mass participation via the Internet. It was his hope that this process could be replicated with other bills in order to make the legislative process more democratic and more responsive to citizen demands.

Figure 4. Online Platform for the 1st Round of the Online Consultation for the *Marco Civil da Internet*.

The initial phase of the consultation, which sought to identify key themes that needed to be addressed in the law, began on October 29, 2009, and lasted until December 17th, 2009. Debate in this period focused on the right to user privacy and freedom of expression on the Internet. This is not surprising given the mobilization that led to the creation of the *Marco Civil da Internet*. According to SAL lawyer and open source advocate Almeida, another key topic that emerged as significant during the first phase, which was not entirely anticipated by

lawyers at SAL, was the importance of net neutrality. After getting this feedback from the first round of the consultation, the lawyers at the Ministry of Justice drafted a preliminary version of the bill which they then shared online. The second round of consultation entailed getting people's feedback on this preliminary version of the bill drafted by the lawyers at SAL. The second phase of consultation began on April 8, 2010, and lasted until May 30, 2010.

Despite the interest in the MCI as demonstrated in the mobilization against the *Lei Azeredo*, relatively few users were responsible for the majority of the input. For example, in the first phase two individuals contributed more than two-thirds of all 636 comments (Sampaio, Bragatto, and Nicolás 2013). Thus, while individuals like Abramovay had hoped that an online platform would allow for mass participation, this did not in fact take place. Another issue in terms of participation was the fact that telecommunications companies and other corporations interested in Internet policy largely avoided the online process, perhaps knowing that ultimately it would be up to individuals at the Ministry of Justice to determine what was included in the law. Accordingly, instead of participating in the online forums, telecommunications corporations submitted letters directly to the Ministry of Justice as they normally did. In an interview with me after the signing of the MCI, Almeida told me that he had made a point of posting these communications between the telecoms and the Ministry of Justice on the collaborative website so that in this way corporations' input could be incorporated into the public debate. For him, this was a manifestation of the ministry's desire to make this a transparent process, something quite different from the ways that laws had been traditionally drafted.

In spite of its limitations, this new collaborative technique using a FOSS platform opened up doors for new types of public engagement in the legislative process. For example, when Almeida visited the Campus Party technological conference in São Paulo in January 2010 to give an update about the progress of the bill, he encountered members of *Transparência Hacker*, a group of hackers who work to create programs and websites to increase government transparency. One of the members, Ricardo Poppi had used the online software Many Eyes to create a text visualization of all the comments posted to the public consultation. At the time Poppi was also an active member of the *Partido Pirata do Brasil* (Brazilian Pirate Party) and believed that there needed to be more forms of direct democracy in which citizens decided state policy rather than elected representatives. In an interview, Poppi told me that he hoped that these interactive images of the text would facilitate the accompaniment and participation of the consultation process by individuals. A longtime supporter of FOSS, Poppi pointed out that the ability for him to access this data and present it in new ways was because the *CulturaDigital.br* website of the Ministry of Culture was created using FOSS, and thus used open software formats that others were able to access. Almeida was impressed by Poppi's initiative and decided that the Ministry of Justice should work with Poppi and *Transparência Hacker* to encourage activist interventions that might enrich the consultation process by making it easier to understand for someone not technically proficient in Internet policy. Almeida asked the members of *Transparência Hacker* "to hack the government." By this he meant that he wanted to harness the work of these individuals to transform and open up the governance process so that it would be more transparent and accessible. In this way, the process of drafting the *Marco Civil da Internet* created a space for certain activist communities to become even more involved in the legislative process typically conducted solely by government civil servants. In this way the boundaries between

activists and government officials were sometimes blurred as they worked together to promote the online bill writing effort.

The bill that the individuals at SAL compiled based on the input collected on the website had three central themes: privacy, freedom of expression, and net neutrality. Overall, Internet freedom activists were happy with the bill. Amadeu still had concerns about language in the bill that required Internet service providers to register user IPs, essentially enabling massive surveillance. However, he felt that these concerns could still be resolved in the legislature. After the bill was compiled by the lawyers at SAL, it circulated in the executive branch to other relevant ministries (Communications, Culture, and Science, Technology, and Innovation). These ministries were then able to make changes to the language of the bill, although no significant changes were in fact made. This inter-ministerial review process took a number of months and thus the MCI was not quickly sent to the legislature. In part, this was due to the transition from the administration of Lula to the administration of his successor Rousseff in which staff changes were made in many ministries, which stalled the government's approval process. Activists expressed frustration at this point when their participation in shaping government policy was no longer wanted and progress on the bill seemed to be stalled. They rightfully considered this delay as evidence that the *Marco Civil da Internet* was not a priority for the Rousseff administration. This delay evidenced the fact that even though the experiment in participatory democracy online opened up new avenues of engagement for a small number of activists, it did not fundamentally alter the decision-making power structure of government. While the government would eventually pass the bill on to the legislature for debate, these same issues of power and who gets to set the agenda would continue to impede the agenda of Internet freedom activists.

The MCI Moves to the Legislature: Participation then Pause

When the executive branch finally passed a completed bill to the Congress in August 2011, it was up to the PT leadership in the *Câmara dos Deputados*, Brazil's lower chamber of congress, to select a lead sponsor who would shepherd the bill through the chamber. The party leadership selected Alessandro Molon (PT), a newly elected congressman from Rio de Janeiro. Molon was a lawyer and former radio journalist from Rio de Janeiro who had previously been a state representative. As a state representative, he had become interested in issues concerning Internet freedom and had even invited Ronaldo Lemos to testify before the state legislature about his concept of the *Marco Civil da Internet* in early 2009. Thus, when Molon became a federal representative in 2011, he decided to take up the cause of Internet freedom as one of his central platforms. While he had been relatively uninvolved in the crafting of the bill he was now sponsoring, over the course of the next two years he became one of the most visible proponents of the bill; he appeared on television and was often cited in newspaper articles. As the sponsor, he also had significant autonomy in terms of altering the text in hopes of securing passage, something that he would do a number of times. This meant that he was both an ally of the activists, while at times a target of activist ire when he made alterations that were against their liking in order to reach political accords to ensure the bill's passage.

Molon decided to launch another round of public consultation about the bill. He hoped to muster public support and to alter portions of the text mainly pertaining to net neutrality that activists thought were unclear, specifically portions that could create loopholes for telecommunications companies to sidestep net neutrality policies. To do this he employed

the *Portal e-Democracia*, a new web site launched the previous year by the PT leadership of the *Câmara dos Deputados* that gave lawmakers an Internet platform to engage citizens using social networks. The text of the bill was placed on the website on Wikipedia-inspired platform that allowed individuals to comment and suggest changes to bills. Furthermore, the website was connected to a number of social media websites (i.e., Facebook and Google+), which created a new avenue for individuals to participate. This meant that the number of people participating in this round was much larger than in the consultation performed by the Ministry of Justice. Additionally, Molon organized a number of public roundtables in Brasília, São Paulo, Rio de Janeiro, and Porto Alegre that included individuals like Amadeu, Caribé, Lemos, and Branco. These were aimed at generating feedback about the bill, but more importantly were meant to generate public support. Molon understood that demonstrating public support would be important to convincing legislators to pass the bill. This was especially true as powerful corporate lobbies, particularly the telecommunications sector, were already lining up against the central tenets of the bill.

Figure 5. Online Platform for Online Consultation of the *Marco Civil da Internet* via *Portal e-Democracia*.

After the consultation via the *Portal e-Democracia* was over, it was ultimately up to Molon and his advisors to decide what suggestions to incorporate. His office subsequently released a document that compared the text that emerged from the Ministry of Justice to the bill that he then presented to the *Câmara dos Deputados*. One of the most significant changes Molon made was to strengthen language relating to net neutrality, which he did based on feedback from activists online and in public meetings about the bill. Importantly, Molon's version stated that the Brazilian Internet Steering Committee would be the arbiter of regulating the net neutrality components of the law. This guaranteed that issues of net

neutrality would be deliberated in a forum where Internet freedom activists had significant sway, as opposed to a government agency such as ANATEL, the Brazilian telecommunications regulatory agency, which many activists believed was beholden to corporate interests. Interestingly enough, while the mobilization against the *Lei Azeredo* revolved primarily around issues of surveillance and freedom of expression, the issue of net neutrality would soon take center stage.

Conclusion

The activist mobilization that led to the creation of the *Marco Civil da Internet* and the collaborative, participatory methods used to write the bill demonstrate how forces in Brazilian society that were once channeled toward ending the military dictatorship are now focused on preserving the Internet as a democratic platform and guaranteeing access to the global network as a human right. While some of the activists like Amadeu and Branco were extremely politically active in the struggle for democracy in the early 1980s, the participation of other younger individuals like Caribé, Lemos, Almeida, and Molon shows how the values and practices of those earlier efforts have endured and are shaping contemporary Internet freedom activism in Brazil. The fact that the PT controlled the institutions of government created an environment amenable to this experiment in *governo aberto*. While critics of the law, and even some of the Internet freedom activists themselves, have since bemoaned the relatively low citizen participation rates, in fact, the *Marco Civil da Internet* was itself an experiment in new forms of democratic deliberation. Rather than holding the MCI process as the definitive model for future "hacking" of the legislative process, Amadeu, Branco, and others contend that it is part of a larger process to seek new ways to strengthen participatory democracy via digital technologies and the Internet. Amadeu has this to say about the creation of the bill:

> The proposal synthesized by the Ministry of Justice for the establishment of a civil rights framework for the Internet in Brazil is evidence that collaborative practices and online participation can improve the comprehension of topics and elevate the quality of democratic decisions. After opening a platform to hear, interact, and debate with society, the Ministry of Justice passed along a synthetic work that is extremely clear and that can be a global reference for national Internet legislation (Amadeu da Silveira 2010).

This quote demonstrates activists' approval of both the content of the MCI and the process through which it was created. Indeed, in 2010, when Amadeu wrote these words, there was still much hope that the bill would be quickly signed into law.

The story of the *Marco Civil da Internet*, however, did not end once it was drafted and sent to Congress. The fact that it included the input of so many citizens and organizations was not reason enough for legislators to quickly pass it into law. Indeed, there was fierce opposition to the bill by representatives with close ties to corporate interests. More surprisingly, even some high-level government officials in the Rousseff administration worked to undermine the bill as it was being debated in Congress, which demonstrated the deep divisions within the PT itself. This demonstrates that merely creating mechanisms of participation does not, by itself, lead to the enactment of policies produced through those ostensibly more democratic processes.

In *The Myth of Digital*, Hindman contends that there are a number of reasons why so-called digital democracy initiatives do not live up to the hype. One of the central reasons for their lack of efficacy is failing to pay attention to the "the difference by speaking and by being heard" in terms of political debate:

> While it is true that citizens face few formal barriers to posting their views online, this is openness in the most trivial sense. From the perspective of mass politics, we care most not about who posts but about who gets read – and there are plenty of formal and informal barriers that hinder ordinary citizens' ability to reach an audience (Hindman 2009:18).

Indeed, barriers to participating in the online consultation of the MCI were relatively low. An individual only needed to have access to the Internet in order to participate. Yet, this did not mean that the legislators who would ultimately have to vote on the legislation ever actually paid much attention to the concerns of Brazilians who participated in the online consultation. In this way, online platforms for participation can often give the feeling of empowerment without actually empowering citizens.

In the following chapter, I examine the fight over the *Marco Civil da Internet* in Congress, which was so fierce that it eventually ground Congress to a complete halt for over three months at the end of 2013 and beginning of 2014. I argue that this was the result of the open, participatory democratic process of the *Marco Civil da Internet* bumping up the opaque, back-room negotiations of a liberal democratic system that is overwhelmingly influenced by corporate interests. Ultimately, the "hacking" was successful in the limited sense that it produced an environment that was not corporate dominated in which to discuss Internet policy. However, whether this new form of citizen participation was successful at leading to concrete structural changes that would alter power structures in regard to developing Internet policy was still far from clear. Ultimately this shows that merely creating structures for citizen participation, online or offline, does not in and of itself lead to a more egalitarian distribution of power in society.

CHAPTER 4

THE BATTLE OVER THE *MARCO CIVIL DA INTERNET* IN THE LEGISLATURE

At the end of January 2013, more than seven thousand geeks, technologists, and digital entrepreneurs from all over Brazil descended upon the Anhembi convention center in São Paulo for the weeklong, 24-hour technology festival, *Campus Party Brasil* (CPBr). The annual technology gathering was a mix of new technology showcase, programmer collaborative workspace, technology job fair, and video gameathon. The majority of the young participants camped out in a section of the convention center that had been converted into a campground for the event, which added to the party-like atmosphere of the gathering.[13] While the festival's major sponsor was Telefónica – a Spanish telecommunications corporation—the conference served as an important organizing space for FOSS and Internet freedom activism, in large part because the organizers of the event were themselves FOSS and Internet freedom activists. Marcelo Branco, one of the co-founders of FISL had been the first director of CPBr when it launched in Brazil in 2008. After he stepped down in 2010, his friend Mario Teza, another FISL co-founder, took over the reins. Their leadership meant that over the years at CPBr, Internet policy was one of the central topics of discussion at panels and workshops. It was at the conference that opposition to the cybercrimes *Lei Azeredo* gained steam in 2008. Likewise, during the online consultation of the *Marco Civil da Internet* in 2009 and 2010, activists and government officials used the gathering to generate support and participation. Now, three years later, however, the Internet freedom bill was stalled in Congress and lacked crucial support from the new administration of President Rousseff. Thus, when I arrived at CPBr in January 2013 to begin a year of ethnographic research, I entered the field at a time in the *Marco Civil da Internet's* legislative history when activists were frustrated by the absence of legislative progress and the seeming power of corporate interests, particularly the telecommunications lobby, to block the bill. Their efforts to use new mechanisms of participatory democracy to effect policy change had come up short.

The disgruntlement among Internet freedom activists was visible at a panel discussion held on the main stage of the convention titled, *O Marco Civil da Internet: uma lei que pode mudar sua vida na rede* (The *Marco Civil da Internet*: A law that may change your life online), which was held on the main stage in the convention hall. Among the speakers was Guilherme Almeida, one of the lawyers from the Ministry of Justice, who helped manage the online consultation that resulted in the bill's language. Almeida was joined by Demi Getschko – the Brazilian Internet Steering Committee member who helped establish the first Brazilian Internet connection in 1992, Manuela D'Ávila (PCdoB) – a young, technology-savvy communist congresswoman, and lawyer Carlos Affonso Pereira de Souza – a representative from Ronaldo Lemos' *Centro de Tecnologia e Sociedade*. All of the panelists were prominent supporters of the MCI and each hoped that it would be brought up for a vote in Congress soon. In trying to explain why the bill had not yet been passed, D'Ávila argued

[13] *Campus Party* was first held in Málaga, Spain, in 1997 and has since expanded to other countries. It is organized by an NGO called Futura Networks and is financially supported by the Spanish telecommunications corporation, Telefónica. *Campus Party Brasil* was first held in São Paulo in 2008.

that the delay was not completely the fault of legislators, because the executive branch took two years to pass the bill on to the congress. She also noted that the bill is very technical and most of the legislators in Brasília had never dealt with such issues. Almeida talked about the importance of *participação cidadão* (citizen participation) in the creation of the bill and said that this process of online, digital collaboration, or "hacking," was the embodiment of 21st century democracy. He was still optimistic that the bill would be voted on in the near future.

Marcelo Branco and João Carlos Caribé, the blogger who helped start the *Movimento Mega Não* against the *Lei Azeredo,* were both sitting together in the front rows of the audience, and they were clearly unsatisfied with the tone of the discussion. Branco held up hand-made signs that read "*#MarcoCivilJá!"* (*#MarcoCivil*Already!) and "*Internet não é telecomunicações"* (The Internet is not telecommunications). Caribé held one that read "*#MarcoCivilJá!"* and "*O Brasil é dos brasileiros e não dos lobistas"* (Brasil is for Brazilians and not for lobbyists). They held up these signs not because they disagreed with the positions of any of the speakers, in fact they largely supported them. Rather, they wanted to make explicit their sense of urgency and to directly call out the telecommunications lobby, which they felt was behind efforts to defeat the bill because of its net neutrality stipulations that the sector opposed. They knew that their signs would be photographed and be shared via social media and in the press. This they hoped would draw attention to the bill and spur action in Brasília. During the question and answer session, Branco took to the microphone and chastised the Rousseff administration and the PT more broadly for not backing the bill. At this point in time, the PT and its governing coalition controlled all three branches of government, which meant that if the party marshaled its political capital it could get the bill signed into law. This criticism coming from Branco, the longtime PT militant and the individual who coordinated Rousseff's social media presence during her campaign for president in 2009, illustrated the rift that had opened up between the executive branch and many activists. Internet freedom activists no longer were so sure that the administration was on their side.

The sentiments of Branco and Caribé were widespread at *Campus Party Brasil* among activists. Whereas just a couple of years before Internet freedom activists had successfully lobbied the executive branch to create an Internet freedom bill and then had been instrumental in the online, interactive method in which it was drafted, the promise of that participatory method leading to a more equitable and just legal framework had been left unfulfilled. In essence, their "hack" of the legislative process had yet to bear fruit and it appeared to them that corporate interests must have been blocking what they considered to be a democratic demand for the *Marco Civil da Internet*.

Figure 6. Activists protest at *Campus Party Brasil* in 2013.

Marcelo Branco (left) and João Carlos Caribé (right) hold up signs at panel discussion about the *Marco Civil da Internet* at *Campus Party Brasil* in São Paulo in January 2013. Photo by Cristiano Sant'anna of indiciefoto.

The Limits of Participatory Democracy

The creation of the MCI represented a victory for Internet freedom activists not only because the policies it included safeguarded an open Internet, but also because of how it was collaboratively drafted, in part, via an online web platform. In Chapter 3, I argued that this experiment in *governo aberto* was facilitated by the PT's control of the federal government and the party's history of supporting new forms of citizen participation. However, this support from the executive branch during Lula's administration (2003-2010) evaporated when his successor Dilma Rousseff (PT) took power in 2011, and instituted ministerial level changes that strengthened the influence of corporate interests within the government. Likewise, when the executive branch forwarded the bill to the Brazilian congress for deliberation, it faced extremely strong opposition from politicians with close ties to the telecommunications sector. In this hostile environment, activists resorted to new mobilization efforts including street protests and online petitions to raise public awareness about the MCI and pressure policymakers to support the bill. Ultimately, the sustained work of these activists over a period of three years along with startling revelations of NSA surveillance that drew international attention to Internet policy created a political context in which the pioneering Internet freedom bill was passed and then signed into law by President Rousseff on April 23, 2014.

In this chapter, I show how the logic of participatory democracy embodied in the creation of the MCI collided with the framework of a liberal democracy implemented in the mid-1980s in Brazil. By liberal democracy, I refer to a style of government that emerged in the 18th century in Europe and is based on Enlightenment ideals about individual liberty, equality, and the rule of law. Periodic elections in which voters select representatives are the primary mechanism through which citizens are understood to participate in governance decisions. This contrasts with systems of participatory democracy that attempt to increase the number of citizens who can take part in a meaningful way in decision-making and that seeks to increase the number of citizens and groups who have access to these processes. Drawing on the work of Santos and Avritzer (2007), I argue that liberal democracy, as currently constituted worldwide and in Brazil, is overwhelmingly dominated by elites and is closely

linked to neoliberal globalization because of the tremendous influence corporations have in the governance process. In other words, the open, transparent method of policy elaboration that encouraged citizen participation that was employed to draft the MCI bumped up against the traditional legislative process that includes back-room deals, political favors, and corporate lobbying.

Scholars of participatory democracy institutions have noted how those arrangements, such as participatory budgeting forums and citizen's health councils, effectively blur the boundaries between social movements and the state (Abers 1996; Baiocchi 2005). In his research on the neighborhood participatory budgeting initiatives in Porto Alegre in the 1990s, sociologist Gianpaolo Baiocchi argued that participatory democracy initiatives create an environment in which the state operated more like a social movement (2005). He asserted that social movement protests decreased in the wake of participatory budgeting not because social movements had demobilized in the city, but rather because social movements were finding new channels through which to give voice to their concerns and to actually affect public policy (Baiocchi 2005:xi–xii). Essentially, the participatory institutions reconfigured how demands were being made on the state. In contrast, the case of the MCI illustrates a reverse process in which activists were remobilizing as the channels of participation became blocked and proved to be ineffective. The failure of the online, participatory democracy experiment to change the law meant that activists were forced to revert to more traditional social movement tactics in order to command the attention of policymakers in Brazil's liberal democratic system.

In the subsequent section of this chapter, I examine how corporate influence in the Rousseff administration, and a general lack of interest in participatory democracy initiatives, resulted in the MCI being stalled in Congress. Then, I describe how a new cadre of young activists, who championed media democratization and who saw the Internet as the new battleground for debates about access to information, took on a prominent role in advocating for the MCI. Then, using material collected through participant-observation, interviews, and archival material, I describe the tactics activists used to combat corporate moves to alter the bill. Since they could no longer rely on the support of the executive branch, I argue that activists resorted to more traditional tactics such as street mobilizations, petitions, and meetings with policymakers to push their Internet freedom agenda.

The MCI Sidelined: The Rousseff Administration and Corporate Influence within the *Partido dos Trabalhadores*

The transition from the Lula administration to the Rousseff administration in 2011 resulted in personnel changes at the ministerial level that created an openly hostile environment for the MCI. For many Internet freedom activists, this was somewhat unexpected given that Rousseff"s campaign presented her agenda as the continuation of Lula's administrative agenda. Nonetheless, many of the individuals responsible for creating the MCI either left or were removed from their positions. Turnover at the Ministry of Justice meant that when Minister Tarso Genro left, so did the team of young, progressive lawyers in the *Secretaria de Assuntos Legislativos* (Office of Legislative Affairs) including Almeida, Abramovay, and Rená. Under Rousseff's administration, both the Ministry of Culture and the Ministry of Communications were headed by individuals with close corporate ties and who lobbied to have central components of the bill altered to make it more business friendly. Telecommunications companies were opposed to the bill's net neutrality policies and media

corporations wanted to limit the bill's impact on intellectual property law. Thus, from 2011 until the middle of 2013, Internet freedom activists found themselves working to promote the bill in a context in which high-level members of the executive branch were trying to weaken or even outright scuttle the bill. While corporate pressure intensified during this period, it was not the only corporate lobbying that threatened the bill. Rousseff's own political background and lack of interest in participatory democracy initiatives meant that she essentially ignored the bill entirely. Understanding her political background and the backgrounds of her ministers illuminates how the new political situation within the executive branch was an impediment to the goals of Internet freedom activists.

Rousseff's political trajectory was quite different from that of Lula, a member of the working class who cut his teeth as a metal workers union organizer in the late 1970s in São Paulo and was one of the primary leaders of the *novo sindicalismo* movement discussed in Chapter 2. In contrast, Rousseff is from an upper middle class, immigrant family from Belo Horizonte. Her political engagement began in the late 1960s when, as a college student, she became a member of the armed Marxist-Leninist guerilla organizations *Comando de Libertação Nacional (COLINA)* and *Vanguarda Armada Revolucionária Palmares—VAR Palmares* that fought to overthrow the military government. In 1970, she was arrested and tortured by the regime, and ultimately imprisoned for two years. She was released in 1972, but was stripped of all her political rights. She settled in Porto Alegre, and in 1979, when political parties were once again permitted and her political rights were restored, she helped found the *Partido Democrático Trabalhista* (PDT), a socialist democratic party that advocated for the type of pragmatic, state-led capitalism that she now endorsed. In the 1980s and 1990s the PDT faced off against the local PT, which under the leadership of individuals like Olívio Dutra and Tarso Genro, was innovating mechanisms of participatory democracy, such as participatory budgeting (Baiocchi 2005; Santos 1998). Rousseff left the PDT in 2000 and joined the PT because she had become uncomfortable with the growing influence of neoliberalism within the PDT. At the time she switched parties in 2000, she was already serving as Secretary of the *Secretaria Estadual de Energia, Minas e Comunicações* (State Secretary of Energy, Mines, and Communications) in the PT administration of Olívio Dutra in the state of Rio Grande do Sul and switching parties was politically expedient. Lula then appointed her to lead the Ministry of Mines and Energy in the federal government before appointing her to be his chief of staff—one of the most influential cabinet-level positions in the Brazilian executive branch. She was a stern, technocratic foil to Lula's charismatic and folksy character. Her election as president was largely because the immensely popular and term-limited Lula had handpicked her as his successor and actively campaigned for her. Thus, Rousseff did not emerge from the party's base, never had close ties to social movements, and was not a member of the party when experiments with participatory democracy were first taking place in the 1980s and 1990s. Her top-down governing approach meant that initiatives like the MCI did not resonate with her. She was unengaged with the bill and left her ministers to take charge. Her ministers were largely opposed to the central tenants of the MCI, which proved to be an impediment to its passage.

Paulo Bernardo, the new Minister of Communications in the Rousseff administration, very quickly became one of the bill's most high-profile critics since he sided with telecommunications corporations in opposing the net neutrality language in the MCI. Bernardo was known as an obedient and competent functionary who had congenial relationships with the business community. He became a member of the PT in the early days

of the party through his participation in the bank employee union in his home state of Paraná. Lula appointed Bernardo to the Ministry of Planning in 2005 after he served for a number of years as a PT representative in Congress. In 2011, Rousseff moved him to the Ministry of Communications where he promptly developed close ties to the telecommunications sector. In October 2012, the industry trade association *Telebrasil* named him the "Telecommunications Man of the Year" for the work he had done on behalf of the sector. Central to his advocacy for telecommunication interests was his opposition to net neutrality. For example, in an interview with a Brasília-based technology journal, Bernardo argued for weakening the net neutrality language in the bill. "The Internet is a massive business environment. This bill needs to be a bill that improves the business environment, not make it worse," he said (Grossman and Queiroz 2012). Internet freedom activists unequivocally rejected the notion that the Internet is primarily a platform for business. Indeed, they saw their efforts as working to preserve the Internet as a space for creative and civic engagement that was not monopolized by corporate interests. Due to the way Bernardo attacked the concept of net neutrality in the press, activists including Branco and Caribé acrimoniously referred to him as the *Ministro das Teles* – the Minister of the Telecoms – as a way to illuminate the interests behind his positions.

A change in leadership at the Ministry of Culture radically transformed it from a bastion for Internet freedom activists to one that aggressively opposed their cause. The new minister, Anna Maria Buarque de Hollanda (PT), halted the agenda of her predecessors Gilberto Gil and Juca Ferreira. The daughter of famous Brazilian historian Sergio Buarque de Hollanda and the sister of well-known Brazilian singer/songwriter Chico Buarque, Hollanda came from an elite Brazilian family. Because of her brother's music career, she had close ties to large record labels and media companies. Upon taking her position, she immediately halted the ministry's free culture, *cultura digital*, and FOSS initiatives, which were also opposed by large media and information technology companies. This included the high-profile partnership with Creative Commons that Gil had championed. Many of the individuals working on these projects, including the individuals who helped create the *CulturaDigital.br* website used to conduct the online consultation for the MCI, found jobs outside the ministry. For activists, Hollanda became the representative for the so-called *Indústria da Copyright* in Rousseff's administration. Hollanda left the Ministry in September 2012 after a short but tumultuous tenure because her pro-corporate positions created a backlash among many artists. Nonetheless, in her relatively short time at the ministry, she effectively cleared it of all Internet freedom activists and their allies.

The constellation of individuals who were now in positions of power in the Rousseff administration created an environment that was no longer conducive to the passage of the MCI. This began at the top because Rousseff had relatively little affinity for participatory democracy initiatives. While Rousseff herself had frosty ties with the Brazilian business community, the individuals she selected to oversee important ministries did have close ties to corporations and were actively lobbying on their behalf from within the administration. Rousseff's cabinet selections, given their allegiances, effectively derailed the participatory goals of the MCI. This demonstrates how the PT's original project of transforming the state to be more attentive to the needs of the working class and the politically excluded had stalled. The failure of the PT's initial project to distribute power more broadly now put the MCI in jeopardy.

New Protagonists Take the Lead: Media Democratization Activists Take Center Stage

In spite of the waning support for the MCI in the executive branch, Brazilian Internet freedom activists pushed for the bill's passage in the Chamber of Deputies where this bill's sponsor, lawyer and former radio host Alessando Molon (PT), was working to convince the leaders of the chamber to allow a vote on the bill. He was optimistic and proclaimed in the press in early November 2012 that a vote was imminent. At this point, a new cluster of Internet freedom activists who were primarily motivated by a desire to radically transform the media sector took on an increasingly important role in organizing activists and setting the agenda. These young media activists were part of a longstanding left-wing movement to break apart the large, family-controlled media corporations (e.g., *Globo, Grupo Abril, Grupo Folha*, etc.) that dominated Brazil. In particular, these activists were concerned about new language Molon inserted in the bill—at the request of Ana de Hollanda's replacement at the Ministry of Culture and former São Paulo mayor, Marta Suplicy (PT)—that stipulated that removal of content online did not apply to cases of copyright infringement. This new language would essentially perpetuate the prevailing notice-and-takedown regime in which websites tend to immediately remove content whenever a claim is made that material infringes copyright, even if that claim is not valid. This means that oftentimes political dissent or innovative creative works are removed from websites because of frivolous copyright claims. In an open letter to Molon, activists stated the danger of the inclusion of this language in the bill in this way:

> Giving room to the interpretation that judicial review is not necessary for the removal of content that violates copyright, the language creates the risk that judicial review will be dispensed with . . . Thus, a simple notification may be sufficient for the providers to withdraw the content for fear of being blamed, even if no illegality is found. A trial will not be done by the courts, but by the provider itself, in a private capacity, creating a situation of censorship, which is unconstitutional . . . In short, this endangers freedom of expression on the Internet for the benefit of private interests (IDEC et al. 2012).

The private interests that they referred to were those of copyright holders, namely large media corporations, who they felt used copyright enforcement as a way to censor criticism and opposing viewpoints. In an interview about the public letter, Pedro Ekman, one of the media activists from the NGO *Intervozes,* said that the inclusion of this new language in the bill made it "clear that *Globo* and other corporations won a battle in terms of the question of copyright" (*Artigo 15 Do Marco Civil Gera Insegurança Jurídica, Avaliam Entidades* 2012). In the letter, which had the support of Amadeu and Caribé among other individuals and organizations, activists asked Molon to remove this language, which he did. The bill, however, did not come up for a vote as Molon was unable to marshal enough support in the chamber given opposition from telecommunications corporations and large media. Internet freedom activists did not have enough support in the legislature to command the agenda.

Concerns about copyright and intellectual property among activists were not new. Indeed, Professor Sergio Amadeu had been railing against the *Indústria da Copyright* for years. However, as the Internet became an ever more important platform for accessing all sorts of news and media (newspapers, television, film, radio, etc.), individuals concerned with the corrosive effects of corporate media domination came to see the Internet as a way to

potentially bypass the centralizing control of corporations. For these media activists, the decentralized nature of the network created space for a diversity of opinions and perspectives that are not always tolerated by large media conglomerates. Three important individuals who found their way to supporting the MCI via their media activism were Pedro Ekman and Bia Barbosa from *Intervozes* and Veridiana Alimonti from the *Instituto Brasileiro de Defensa do Consumidor* (IDEC, the Brazilian Institute for Consumer Defense). Together with Amadeu, Caribé, Lemos, Branco and others, they become some of the most prominent promoters of the MCI in 2013 and 2014, helping to organize activists and guide the legislative agenda. I interviewed each of them individually during the course of my fieldwork in 2013. A brief discussion of the background of the three individuals demonstrates the ways in which issues involving Internet freedom had spread beyond the confines of traditional techie circles such as FOSS militants and science and technology researchers.

Ekman and Barbosa were both trained as journalists at the *Universidade de São Paulo* in the early 2000s, where they both became active in the student movement on campus. In particular, given their interest in journalism, they were drawn to the longstanding struggle to reform the Brazilian media sector—a struggle that goes back more than 30 years to the redemocratization period of the mid-1980s. The objective of media activists like Ekman and Barbosa was to reduce the concentration of media control in the hands of a small number of corporations and families. This included curbing the power of large Brazilian media corporations, such as *Grupo Globo*, *Grupo Abril,* and *Grupo Folha*, as well as breaking regional media monopolies often held by politicians or elite, politically connected families. Given that the current media configuration in Brazil was put into place during the dictatorship, and because in many cases the media were complicit in propping up the regime and working to maintain elite control of the government, both Ekman and Barbosa articulated their efforts as attempts to "*democratizar a mídia*" – to democratize the media. It is their belief that true democracy could not truly exist in Brazil without a democratization of the media. In 2003, Barbosa was one of the founders of *Intervozes*, an NGO that would continue the efforts of the student movement to "create public systems of communication that are strong" and to create public policies that instantiate the notion that "the right to communication is a human right." Ekman worked for a couple years as a video producer at a large media company before joining *Intervozes*. In our interview in 2013 in the NGO's small São Paulo office, he stated that what made *Intervozes* different from other media activist organizations and why the organization had become so involved in the struggle over the MCI was that the NGO had a very broad concept of communications that was not restricted to just radio, television, and newspapers. For him, the "*convergência digital*" (digital convergence) – the convergence of media, information technology, and telecommunications – meant that Internet policy was increasingly central to all discussions about communication policy.

Alimonti was a young lawyer at IDEC in São Paulo who had also attended the *Universidade de São Paulo*. As a student there in the mid-2000s, she had also become active in the student movement and grew familiar with the work of *Intervozes*. Her expertise in her program at the university was in the area of telecommunications, and after graduating she began working at IDEC with a portfolio including issues relating to telecommunications and Internet policy. Her predecessor at IDEC had participated in the movement against the *Lei Azeredo* and the creation of the MCI, and so she continued and expanded his work. In particular, she became involved in a large, multi-organization campaign called *Banda Larga é Direito Seu* (Broadband is your right), which attempted to get the Brazilian government to

make fast and affordable high-speed Internet access available to all Brazilians. Because of her work on this campaign, Alimonti ran for and was elected to the board of the Brazilian Internet Steering Committee as a representative of the non-profit sector in 2012. This position gave her a high-profile institutional perch from which to raise issues of Internet policy. For Alimonti, the MCI was important because it would determine what type of Internet access was available to citizens. Universal access would not be as meaningful if the Internet people could access was completely corporately controlled.

In their capacities at *Intervozes* and IDEC, Ekman, Barbosa, and Alimonti gained experience lobbying policymakers, organizing activist networks, and analyzing public policy and legislation. It is important to note that while they were some of the most engaged activists at this point in terms of organizing, they were part of a much larger network of one hundred or so individuals who actively followed the progress of the MCI and participated in different capacities. Arguably, what separated these three individuals from many others was that they had organizational platforms that allowed them to focus their efforts on political mobilization. This gave them the time and resources to focus on coordinating the geographically scattered constellation of activists who were connected via email listservs and social media, and who came together periodically at conferences and activist meetings. The increased role of these individuals who were concerned about media democratization indicates how issues concerning Internet freedom now gained attention among groups not specifically focused on the Internet policy, but who shared much broader democratization goals that involved diminishing the power of private corporations.

Cybercrimes – The *Lei Azeredo* Repackaged and the *Lei Carolina Dieckmann*

Throughout 2012, Rousseff's administration continued to hold a hostile position in regard to the MCI. This made bringing the bill up for a vote in Congress incredibly difficult even though both chambers of congress were controlled by the allied governing coalition and typically worked closely with the administration to set the legislative agenda. Without pressure from the administration, however, there was little incentive for the leaders of the parties to bring the MCI up for a vote. Furthermore, in order for the coalition to bring a bill to debate, the leaders of all 10 parties in the ideologically diverse governing coalition needed to agree to bring it to the floor. This arrangement gave a great deal of veto power to individual political parties. Parties allied with corporate interests that opposed the bill could block debate without even having to vote against the legislation. This allowed them to stall the bill indefinitely. Activists understood this stalling tactic to be central to the strategy of corporate lobbies. As Caribé told me during an interview, the maintenance of the status quo without the MCI was essentially a victory for corporations.

More ominously for activists, at the end of 2012 and beginning of 2013, Rousseff signed into law two cybercrimes bills. The media referred to the first of the two laws as the *Lei Carolina Dieckmann* (Carolina Dieckmann's Law) after a famous blonde *Globo* television actress, Carolina Dieckmann, whose nude photos were retrieved from her cell phone and email account and published on the Internet. When the news of the photos broke in May 2012, her high-profile status drew nationwide attention. The media attention created pressure for the legislature to act, and activists knew that a hastily created cybercrimes bill could have significant, long-term, negative repercussions not fully understood by lawmakers in the heat of the moment. Two of the Internet freedom activists' strongest supporters in Congress, Manuela D'Ávila (PCdoB) and Paulo Teixeira (PT), went on the defensive by

stepping forward to draft the final version of the bill, which created severe penalties for illegally accessing digital devices. The fact that these two individuals who had long advocated for the passage of the MCI would draft a cybercrimes bill at first glance seemed perplexing. However, as D'Ávila told me in an interview, the two felt that they would have a better chance of watering the bill down in the process of drafting it than they would later on when it was debated on the chamber floor. She contended that they had succeeded and that the final law was much less dangerous than what would have potentially been passed had other, less progressive legislators been in charge of shepherding the bill through Congress.

The second cybercrimes law Rousseff signed was a modified version of the cybercrimes *Lei Azeredo*. While activist mobilization had successfully halted the bill in 2009, Azeredo (PSDB) continued reworking the bill and finally limited its scope to phishing, which referred to an illegal attempt to elicit sensitive information (e.g., passwords, credit card numbers, etc.) by masquerading as a trustworthy entity in electronic communication. Phishing was of particular concern to banks because criminals used this strategy to trick patrons into disclosing account information, which was then used to siphon money from those accounts. Azeredo had close ties to the banking sector that stemmed from his period as governor of the state of Minas Gerais, when he oversaw the privatization of a number of publicly owned banks. Internet activists felt that the bill had been so significantly altered that it no longer posed a significant threat to Internet freedom because it specifically targeted what was clearly criminal behavior. Nonetheless, it was disheartening for them to see more progress on the cybercrimes bill that had sparked their mobilization, while the MCI was stalled in the legislature.

When I interviewed Ronaldo Lemos, the legal scholar who first suggested the concept of an Internet rights bill, he told me that the passage of the *Lei Azeredo* in its modified form was a "betrayal" by the government. This was because when Lula first backed the idea of the MCI in 2009 at FISL, he endorsed the activists' belief that a civil law outlining Internet rights should be passed *before* a penal law defining Internet crimes. Now, the administration of his handpicked successor, Rousseff, who had been at his side when he made this announcement in 2009, had reneged on Lula's promise. Lemos said that activists always knew getting the MCI passed in Congress would be difficult, but they initially hoped congressman Molon would be successful in convincing party leaders to allow the MCI to reach the floor for a vote by arguing that *all* Internet bills – the MCI and cybercrimes bills – should be voted on at the same time. This, they hoped, would give them leverage by essentially packaging the bills together. However, the *Partido do Movimento Democrático Brasileiro* (PMDB), the largest party in the governing coalition, blocked this proposal because it opposed the net neutrality language of the bill. In effect, the Rousseff administration and its allied governing coalition in Congress demonstrated no interest in pursuing the agenda of the Internet freedom activists. Quite the contrary, now cybercrimes bills – the very things that activists had fought so hard to prevent – were easily and quickly passed into law. The national discussion about Internet policy had been essentially hijacked.

The failure to even be able to bring the MCI up for a vote after years of discussion about the bill created a great sense of frustration among activists. It was this frustration that was on display at the *Campus Party Brasil* when Branco and Caribé publicly criticized the lack of government action. However, beginning in June 2013, two important events – one global and one national – would refocus attention on Internet policy and on Brazilian democracy. Edward Snowden's revelations about NSA mass surveillance ignited a global

debate about Internet policy and governance, while massive street protests in Brazil drew attention to a democratic system that was not living up to the expectations of its citizens. In tandem, these two events reanimated Brazilian Internet freedom activists and dramatically altered the political environment to their advantage.

NSA Mass Surveillance: Edward Snowden and the Internet in the Spotlight

On June 5, 2013, Glenn Greenwald, a Rio de Janeiro-based American journalist published in the British newspaper *The Guardian* the first article about leaked US National Security Agency (NSA) materials that former US intelligence operative Edward Snowden provided him (2013). The article revealed how the US telecommunications company Verizon Communications was providing the metadata of all calls on its network to the NSA. It was the first in a long stream of articles based on the leaked documents that exposed the massive NSA surveillance system, which relied both on corporate collusion in collecting data as well as clandestine tapping of the international telecommunications network. The revelations about NSA mass surveillance focused global attention on Internet policy because of the ways that telecommunications technologies were used to collect and monitor individuals worldwide. The news caused an international shockwave and drew widespread attention to ways that the US government was secretly using the Internet for surveillance and espionage, ostensibly in the name of fighting terrorism. While Snowden's identity was initially kept secret, as soon as he revealed himself in a television interview with Greenwald from his hotel room in Hong Kong, he became one of the most wanted individuals by the US government, which ultimately charged him with espionage and forced him to seek political asylum in Russia (Poitras 2014). The effect of the NSA revelations was to discredit the US government's discourse on human rights and Internet freedom, which had been a central talking point of the US State Department during the initial years of the Obama administration (Morozov 2011). Particularly damning was the fact that there was essentially no democratic oversight over the surveillance programs since Obama administration officials lied under oath to Congress about the existence of such surveillance of US citizens and foreign nationals. In short, US policy did not match its practice.

For many Brazilian Internet freedom activists, the existence of US Internet surveillance was not shocking. Indeed, individuals like Sergio Amadeu had been warning people about the dangers of both government surveillance and the amount of data that private corporations were amassing about individuals in large data centers. The NSA leaks simply provided concrete evidence that substantiated their fears. Indeed, the collusion between the NSA and large US-based information technology companies, which was referred to as the PRISM program by the NSA, was particularly significant to Brazilian activists. Early in the Lula administration, when Amadeu was leading efforts in the federal government to switch to FOSS, he had argued that the Brazilian government should not use proprietary software, including Microsoft products, because there was no way to inspect the source code and confirm the software was secure. The Snowden revelation proved his fears were well founded as it was revealed that Microsoft had worked with the NSA to create "backdoors" in hardware and software to facilitate NSA access of information that clients, such as the Brazilian government, had been told was secure.

The news about NSA mass surveillance alarmed the Brazilian government officials, including President Rousseff. The Brazilian government relied on a number of Microsoft software products, which meant that the NSA could easily access Brazilian government

materials. Likewise, because the vast majority of Brazilian Internet traffic passed through computer servers in the US, the NSA had the capability to easily monitor the vast majority of Brazilian Internet activity. President Rousseff declared in an interview with a science and technology reporter that her administration would reexamine the MCI in light of the NSA revelations:

> We are going to revise the *Marco Civil da Internet* because one of the questions we need to observe is where data is stored, because many times the data is stored outside of Brazil, principally by Google. We want obligatory storage of data of Brazilians in Brazil. And we will revise to see what can be done to better guarantee privacy (Grossman 2013).

The notion that data being stored in Brazil would be safer and harder for the NSA to intercept was actually somewhat naïve given the nature of a decentralized, global network. However, this sentiment shows how Internet policy was now seen through a new geopolitical light in which a nationalist discourse about technological control and sovereignty was increasingly apparent. Most importantly, the Snowden leaks brought attention back to Internet policy and reminded people of the ways that the Internet could be used to violate civil liberties.

The revelations about NSA mass surveillance broke just a couple of weeks before FISL in July 2013. By the time activists gathered in Porto Alegre, Edward Snowden was already developing into a hero among Brazilian Internet freedom activists. At the conference Amadeu and Caribé gave a panel presentation titled *A internet sob ataque… a batalha final é agora* (The Internet Under Attack…The Final Battle is Now) in which they discussed the effects of the recent news. They began their presentation by showing a short clip from an interview done with Snowden by documentary filmmaker Laura Poitras while he was still holed up in a hotel room in Hong Kong. In the clip Snowden elaborated on how the NSA was operating without any democratic oversight and how this was a threat to civil liberties worldwide. At the conference, activists first mentioned the idea of trying to get the Brazilian government to offer political asylum to Snowden, who had fled to the Moscow airport and whose status was in political limbo as the US government rescinded his passport and tried to have him returned to the country to face espionage charges. Edward Snowden's case brought into relief the extent to which the US was using the Internet as a tool to maintain global hegemony. For Brazilian activists this demonstrated the potential power of digital technologies, and why creating a more just, democratic system of governance over the Internet was so important. The virtually simultaneous wave of massive protests in Brazil that were organized in large part via social media further highlighted what Internet freedom activists considered to be fundamental flaws in the Brazilian democratic system.

Jornadas de Junho – Democracy in the Streets and the Political System in Question

In early June 2013, a massive and unprecedented series of street protests spread across Brazil. Over the course of the month, millions of citizens poured into city centers and closed main thoroughfares during the evening rush hour to voice their disapproval of the national status quo. There were no clear issues that united protestors, although issues relating to access to social services (education, healthcare, transportation, etc.) and combatting corruption were popular themes. The mass demonstrations, which came to be collectively known at the *jornadas de junho* (days of June), were initially sparked by a number of small

protests in a handful of Brazilian cities organized by the left-wing activist collective, *Movimento Passe Livre* (MPL), which was protesting the rise of the cost of public transportation while calling for a completely free public transportation system. At one such protest in downtown São Paulo on June 13, 2013, which I attended while conducting research in São Paulo, the police used violent, urban counter-insurgency tactics to disband the protestors. In the process, they injured a number of protestors as well as journalists covering the protest. This police violence created a popular backlash among the middle class in São Paulo and throughout Brazil. This motivated more than a million people across the country to participate in the next protest on June 17th. Whereas the mainstream media had previously disparaged the bus-fare protestors as anarchist hooligans, they promptly embraced the increasingly white, middle class youth who now composed a significant portion of the protesters who filled the streets. The issues raised by protesters also expanded to include middle class concerns like lack of investment in public education, an inadequate healthcare system, political corruption, and the enormous costs of hosting mega events like the upcoming 2014 World Cup and the 2016 Summer Olympics, whose concrete benefits to society were unclear. The political views of protestors ran the gamut from left-wing social justice advocates to fascists who called for the return of the military dictatorship. The lack of any central organization meant that no specific demands for change were ever created and politicians struggled to figure out how to respond given that there were no clear leaders. Ultimately, the issues and views of the protestors were diverse and sometimes contradictory, but clearly millions of Brazilians were unhappy with the current state of affairs in the country.

The political class (politicians, civil servants, and members of the judiciary) was one of the symbolic targets of protestors. For example, at the protest in Brasília on the night of June 17th, thousands of protestors converged on the grassy mall in front of the Brazilian National Congress, which is lined by government ministries. They waded into the reflecting pool in front of Congress holding signs and chanting. Hundreds even managed to overwhelm security and climb to the roof of the building. The image of the shadows of protestors on the white modernist, inverted dome that houses the Chamber of Deputies became one of the iconic images of the protests.

Figure 7. Brazilian protestors climb on top of the National Congress in Brasília

On June 17, 2013, protestors in Brasília converge on the National Congress and climb onto the building's roof. Photo by Valter Campanato from *Agência Brasíl*.

For many Internet freedom activists, the protests across the country represented a desire by Brazilian citizens to have their voice heard. In essence, the fact that the masses needed to turn to the streets to make demands on the state was evidence of a political system that was broken and in need of rejuvenation. For example, on June 20 FOSS activist Marcelo Branco connected the Brazilian street protests to the Arab Spring, the *Indignados* movement in Spain, and Occupy Wall Street (OWS) at a roundtable about the protests that I accompanied online via video streaming; the roundtable was organized by the *Gabinete Digital*, the state of Rio Grande do Sul's office of digital participation. Drawing heavily on sociologist Manuel Castell's (2013) work on contemporary social uprisings, Branco argued that these movements are distinct in that they are not party- or union-led and are thus horizontal and leaderless. This, he contended, meant that they did not have short-term, electoral motivations, but were seeking deeper change, even if they did not know exactly what that looked like:

> The agenda of these protestors in the network society, of the *nativos digitais* (digital natives) who are the protagonists at this moment, is a long-term agenda. It is an agenda of structural change, an agenda to change the political system.

The long-time union activist and PT militant was not arguing that old institutions like political parties and unions would become meaningless, but rather that the protests were the rumblings of desire to restructure institutions in such a way that gives members the capability to more actively participate. For him, new digital platforms and *governo aberto* initiatives like the MCI represented such a solution. In essence, the protests reaffirmed Internet freedom activists' belief about the potential for new digital technologies to facilitate democratic participation.

Activists also pointed to the novel ways in which social media and the Internet had been used to organize the protests and share political opinions. For example, the viral spread of videos of police violence on social media provoked hundreds of thousands to take to the streets on June 13. Citizens also used social media platforms to document the protests through commentary, photos, and videos. In many ways, protestors became independent citizen journalists who were bypassing the filter of the mainstream media. The use of these technologies, however, also posed a threat to protestors. Police forces who claimed to be battling dangerous "foreign and anarchist elements" also attempted to use these new technologies as a way to monitor activists and demanded that social media corporations reveal the identities and locations of users whom the police felt posed a threat. Indeed, the reliance on social media websites owned by corporations (i.e., Facebook, Twitter, Google) meant that even if traditional media, like radio and television, were no longer the only channels through which information was disseminated to the masses, the spread of information was still subject to being filtered by corporations. Thus, the protests once again shed a light on how the Internet and digital technologies could either be used as a platform for democratic mobilization or a mechanism for citizen surveillance.

In this context, the MCI became doubly important for activists. First, they believed that the participatory way in which the bill was created represented a model for the new forms of democratic participation that would address the desire to restructure old political structures that were no longer meeting the demands of the societies they governed. Second, activists felt that the MCI would preserve the Internet as an open platform for civic

engagement. This was something that was essential for a democratic and socially just society. Activists decided to take advantage of the political moment in Brazil in which all components of Brazilian social and political life were being examined in order to bring the issue of Internet freedom to the fore. They did so by taking to the streets and incorporating their objectives into the larger demands of the street protests.

***Na Rua e na Rede* – On the Street and Online**

Many Internet freedom activists had themselves taken part in the street protests that erupted at the beginning of June. The police repression of demonstrators outraged them and exposed the extent to which their dreams of democratization were still unfulfilled. In 2008 and 2009 during the movement to stop the *Lei Azeredo,* activists had staged public protests – *atos* or *manifestações* – such tactics were often relatively small and took place inside government buildings, like the national congress or state assembly buildings. However, in 2013 and 2014, inspired by the massive street marches, activists in São Paulo did something that was novel for Internet freedom activists worldwide – they took to the streets to broadcast their demands. For activists such as Amadeu who had taken part in the pro-democracy *Direitas Já* (Direct Elections Now) street protests in 1984, this type of public demonstration was a time-tested method of social movements in Brazil. New digital technologies, like social media, had altered the techniques activists were using to gain attention for their causes; yet, Internet freedom activists found that virtual activism was not in itself effective. Thus, they decided to combine street protests with online mobilizations. They referred to this complimentary, hybrid tactic as *ativismo na rua e na rede* – activism online and on the streets.

The first such action took place on the night of June 25, 2013 when Amadeu, Ekman, Alimonti, and others organized the *Assembléia Popular Contra a Manipulação da Mídia e em Defesa da Internet Livre* (Popular Assembly Against Media Manipulation and in Defense of a Free Internet) in São Paulo. Sergio Amadeu promoted the event on his Facebook page this way:

> We are going . . . to discuss the democratization of communications, liberty on the Internet, and the ways to denounce the distorted discourse in defense of unbridled economic power that is practiced by the media.
>
> We are going to join our forces against the attempts by the Minister of Communication to turn over control of the Internet to telecommunication corporations. The large telecommunications companies, the same ones that charge the highest prices for telephone access in the world, want the power to filter the Internet to turn it into a TV-cable network.
>
> An *Internet livre* bothers many people. It bothers *Globo* and *Veja* and their attempts to manipulate information. It bothers repression, because any citizen can film anti-citizen aggression and upload it onto a social network. It bothers corrupt people who do not want transparency in the government.
>
> We are going to discuss the *Marco Civil da Internet*… because if *Globo* and the *Teles* (telecommunication companies) block the approval of the *Marco Civil da Internet*, a

> normal citizen will have less power to denounce, discuss, inform themselves, entertain themselves, in short, to communicate freely (Amadeu da Silveira 2013).

Starting around dusk, hundreds of protestors, who had been mobilized via social media, packed the plaza beneath the *Museu de Arte de São Paulo* (MASP) along the iconic *Avenida Paulista*—the boulevard that passes through Brazil's most important financial district. The location was symbolic because shutting down *Avenida Paulista* had been a goal of the initial bus-fare protestors of early June because of the media attention that would be generated by blocking the avenue. While protestors this day never intended to block off the street, they did want to make their presence physically known. As the sun went down, activists used mobile digital projectors to project the words *#marcocivil* and *Você sabe quem invade seu computador?* (Do you know who is invading your computer?) They covered over the street-side billboards with posters that read, *A Internet é Livre!* (The Internet is Free!). These urban interventions were intended to capture the attention of people walking to metro stations or in their cars headed home. The event was broadcast live on the Internet by the independent media group *Mídia Ninja*. This meant that people who were not in São Paulo on that day, including myself, could still participate virtually in the protest by watching it live. Participants were encouraged to document their presence on social media by posting photos, videos, and commentary.

The event was not merely meant to rally the faithful, but also to generate new supporters. In particular, activists wanted to attract young people, Branco's *nativos digitais,* who had recently been politically activated by the street protests. Protest planners envisioned a teach-in format. This was a natural fit for Amadeu, the university professor known for impassioned speeches that succinctly expounded on the issues at stake. A small stage was created in the middle of the plaza where individuals used a megaphone to speak to the crowd. Alimonti, Ekman, and Amadeu talked about the three principal threats to the Internet and how the MCI addressed these menaces. Up first was Alimonti who explained the concept of net neutrality, which she described as "the heart" of the Internet. She argued that abandoning this policy, as telecommunications companies wanted, would "change the Internet as we know it," essentially turning it into a system comparable to cable television, which would be controlled by a few powerful corporations. Ekman spoke about how the MCI protects freedom of expression by mandating judicial review to remove content and how important a law governing Internet policy is in a digital age because, "who controls Internet cables is going to control all the communication in the world." Amadeu gave a fiery speech about the threats to privacy and the recently revealed collusion between the NSA and American corporations (Microsoft, Google, Yahoo!, etc.) to surveil Internet users worldwide. He proclaimed:

> A free country depends on free communication and without the MCI that will not happen… The large telecommunications corporations and the copyright industry know that communication and culture will be increasingly digitized and they are acting to defend their strictly economic interests.

At the core of all three speakers' arguments was that corporations were attempting to alter the Internet to increase profits. In protest, they argued that the MCI would serve to protect the Internet as a space for artistic and civic engagement.

A large photo of Edward Snowden was sporadically projected onto the façade of the art museum during the protest. The former NSA operative was quickly becoming a hero to Brazilian Internet freedom activists such as Amadeu who mentioned Snowden in his speech. Just as these activists had become reenergized by the democratic protests in Brazil, the information Snowden provided raised fundamental concerns about the way the security apparatus of a supposedly democratic state, the US, was operating essentially without democratic oversight. Furthermore, corporations were actively colluding in what amounted to the violation of human rights, such as the right to privacy. Ultimately, the information Snowden revealed and its particular impact in Brazil would change the political context in such a way that activists would help secure the passage of the MCI.

The Return of the *Marco Civil da Internet*

In the wake of the revelations about NSA mass surveillance, which began in June 2013, Internet freedom activists realized that the political terrain had shifted in Brasília, particularly within the Rousseff administration. Activist discussions about strategy picked up significantly on their email listserv. Congressman Molon's office also reengaged and began more strongly pressuring for action in the Congress on the legislation. Increasingly activists were convinced that the MCI would be passed in some form. However, they were unsure what alterations the administration would make in order to secure its passage. They knew that the administration wanted to score a symbolic victory, but at what cost? They were concerned about back-room deals and concessions the administration would make during its passage. At this point, the political process was opaque and largely inaccessible to activists; it was the antithesis of the open, transparent process that they had promoted in the creation of the bill itself.

Not surprisingly, the telecommunications lobby, led by the industry association *SindiTeleBrasil*, which represents telecoms like Telefónica/Vivo, Oi, Claro, and GVT among others, proved to be the biggest threat to the MCI. They had a strong ally in Congress, Congressman Eduardo Cunha (PMDB), who was the leader of his party in the chamber. The goal of the telecommunication corporations was to remove or disfigure the net neutrality stipulations in the bill. Given that the Minister of Communications, Paulo Bernardo, had previously sided with the telecoms, activists were concerned that the Rousseff administration would cave to the sector, which also happened to be one of its largest political campaign contributors. Likewise, activists were apprehensive about whether or not Molon would succumb to political pressure. They were unsure whether he would steadfastly defend net neutrality if push came to shove. A number of amendments to the bill had already been introduced in the legislature that would essentially gut the bill in activists' opinion. A last minute move during the debates by a skilled politician could have led to the passage of a bill, but an utter defeat for activists. Activists were on the outside looking in and had to trust that Molon, a politician with few historic links to Internet freedom activists, would stand up for the principles of the bill when push came to shove.

Tension between activists and Molon boiled over on August 10, 2013, at CONSEGI, a conference in Brasília sponsored by the state-owned informatics corporation SERPRO that promotes the use of free software. Molon sat on a panel along with Amadeu and Ekman to discuss the current state of the MCI in the legislature. When Amadeu and Ekman were given a chance to speak after Molon, they both aggressively pressed him on news that he had once again inserted notice-and-takedown language in the bill, allegedly at the request of the media

conglomerate *Grupo Globo*. Amadeu claimed that this language was inserted *na calada da noite* – in the "dead of the night" – which indicated how corporate interests bypass public, democratic discussion in order to achieve their objectives. Molon contended that he inserted this language at the request of the Ministry of Culture. *Globo's* indirect power was seemingly exerted through the ministry, reaffirming activists' belief that corporations had undue influence in the Rousseff administration. Molon argued that there were so many enemies of the MCI that strategically it made more sense to make some changes in order to diminish resistance from different sectors that might result in a complete blocking of the bill. He argued that the mainstream media's ability to influence lawmakers was something that should not be underestimated. Nonetheless, Molon agreed to review this decision in light of the fact that activists had indicated they could not support a bill that included a notice-and-takedown policy.

During the question and answer session, a longtime digital inclusion activist from São Paulo, Béa Tiribiça, stood up in the audience and fiercely demanded that Molon share with activists the language of what she called "his" bill, which was now circulating among legislators in Congress. This phrasing indicated the frustration of activists, who were concerned about deals lawmakers and policymakers where making that were not shared with the public. Her comments illustrated how activists now had considerably less leverage to influence the development of the bill. Molon said he would share the latest version of the bill and he urged activists to continue pressuring lawmakers and the administration. He declared that he was not willing to make any concessions in terms of net neutrality. However, given what had happened with notice-and-takedown, activists like Tiribiça were apprehensive.

On September 1, 2013, a bombshell revelation hit that would even more radically shift the Brazilian debate on Internet freedom. The highly watched television newsmagazine, *Fantástico* on the Globo network, ran a segment co-produced by Glenn Greenwald based on the Snowden leaks that revealed that the NSA had wiretapped the personal phone of President Rousseff and had recorded her conversations. The segment also revealed that the US had conducted espionage on the state oil company, Petrobrás, and the Ministry of Mining. This sent shockwaves through the political class in Brasília and was front-page news across Brazil. President Rousseff was reportedly outraged by the surveillance conducted by a country that was supposedly an ally. Despite a personal call from President Obama to apologize, a little over two weeks later, on September 17th, Rousseff cancelled a long-planned official state visit to the US. By chance, I was at the US embassy in Brasília presenting some of my initial findings when the news broke. US diplomats at the Embassy in Brasília were shocked Rousseff had decided to cancel the visit and scrambled to deal with the political fallout from her decision.

These revelations immediately triggered intense interest about the MCI by the president's office. While none of the components of the MCI would in themselves protect against the type of mass surveillance being done by the NSA, the vision of an *Internet livre* and the rights of Internet users encapsulated in the bill represented a stark contrast to the practices of the NSA. The bill became a symbol of the alternative, ostensibly more democratic path that the Rousseff administration decided to embrace as a rebuke to US policy.

As activists pressured congressman Molon, they also worked to directly influence Rousseff. Carlos Cecconi, a technical advisor at the Brazilian Internet Steering Committee who had been Amadeu's number two at ITI when Amadeu was coordinating the

dissemination of free software in the federal government, began communicating with Rousseff's advisors, arguing that she would benefit from consulting the Brazilian Internet Steering Committee because of its technical expertise. Cecconi had been working on setting up a presidential meeting for a while to no avail, but in the wake of the NSA revelations, such a meeting made more sense to the president's advisors. This resulted in a meeting on September 16, 2013, with Rousseff, a number of cabinet ministers including Bernardo and Congressman Molon, and the entire board of the Brazilian Internet Steering Committee. The committee included important Internet freedom activists such as Amadeu and Alimonti, as well as the electrical engineer Demi Getschko and Affonso. According to Affonso, Rousseff entered the conference room holding in her hand the committee's *Decálogo* – a document of principles published by the committee in 2009 that was a precursor to the MCI, which will be discussed in greater detail in Chapter 5. Rousseff said that she had read the *Decálogo* and agreed with it completely. Members of the committee were each allowed to speak briefly. They emphasized the importance of net neutrality and not including notice-and-takedown language in the bill. Rousseff stated her agreement with the activists. Importantly, Bernardo spoke very little, which activists like Alimonti interpreted as a sign that his influence over the issue had waned. Activists left upbeat due to the fact that at least their voices had been heard directly by Rousseff.

A week later, on September 24, 2013, Rousseff gave the opening speech of the UN's 50th General Assembly in New York. Speaking directly before President Obama, Rousseff dedicated her speech to denouncing NSA surveillance. She also forcefully backed net neutrality and essentially repeated the words of the activists from her meeting and portions of the Brazilian Internet Steering Committee's *Decálogo*. She embraced the vision of Internet governance that members of the steering committee shared with her and that was championed by activists who were trying to democratize Internet governance. She said:

> We need to create multilateral mechanisms for the worldwide network that are capable of ensuring principles such as:
>
> 1. Freedom of expression, privacy of the individual, and respect for human rights.
> 2. Open, multilateral, and democratic governance carried out with transparency by stimulating collective creativity and the participation of society, governments, and the private sector.
> 3. Universality that ensures the social and human development and the construction of inclusive and non-discriminatory societies.
> 4. Cultural diversity, without the imposition of beliefs, customs, and values.
> 5. Neutrality of the network guided by technical and ethical criteria, rendering it inadmissible to restrict for political, commercial, religious or any other purpose.

Most important for activists was her full-throated support of net neutrality. She had elevated this issue to the global stage in a way that had never been done before. It also meant that she had very publicly committed her administration to fighting for net neutrality.

Net Neutrality, the Telecommunications Lobby, and Corporate Influence in Congress

In spite of the Rousseff administration's new embrace of the MCI, corporate influence over legislators, particularly the telecommunications sector, was still strong enough to potentially scuttle the bill or alter it in such ways as to render it hollow. Before her trip to the UN, in early September Rousseff declared the MCI to be in *regime de urgência* (urgent regime). This classification by the president, which is reserved for extraordinary cases, mandates that both chambers of congress vote on the bill within 45 days or else lose the capacity to debate any other legislative issue. This maneuver, in conjunction with the fact that the president's political coalition controlled both legislative chambers, almost certainly meant that a vote on the bill would take place. However, opposition among legislators with close ties to the telecommunications companies was unyielding. The legislator who led the opposition to the bill in the Chamber of Deputies was Eduardo Cunha (PMDB). He was also the leader of the largest party in Rousseff's coalition, which allowed him to almost single-handedly block a vote on the bill.

Examining the Cunha's background illuminates the ways that telecommunications multinationals and the neoliberal economic policies they promote became so influential in the Brazilian legislature. Cunha began his political career in the early 1990s as an ally of President Collar de Mello (1990-1992), who pushed through a series of neoliberal reforms that privatized publicly owned resources. In 1991, Collar de Mello appointed Cunha to be president of Telerj, the state telecommunications company of Rio de Janeiro. Cunha oversaw a reduction in public investments and preparation for privatization, which would ultimately take place in 1998 during the administration of President Cardoso (1995-2003). He left the position in 1992 after accusations of corruption under his watch, but continued to pursue a role in local politics. In 2003, after two years in the state legislature in Rio de Janeiro, he assumed a position as *Deputado Federal* (congressman) with the PMDB. In 2013, Cunha was elected the leader of his party in the Chamber of Deputies. Ever since his time at Telerj, Cunha has had a strong interest in issues related to telecommunications and strong ties to the telecommunications corporations. Because of these connections, he was opposed to the net neutrality language of the MCI. He championed the position of the telecommunications companies that they should be able to manage the Internet traffic on the cables that they owned since those cables had been privatized in the 1990s.

While Cunha was the public face of opposition to net neutrality, he was not the only legislator who was opposed to net neutrality. Indeed, even members from the president's party diverged on this point. In great measure, because of the technical nature of the concept of net neutrality, many legislators could not grasp what it actually entailed and thus its ramifications. Scheduling meetings to discuss the issue with legislators to explain it to them was a priority for activists like Ekman, Barbosa, and Alimonti who were frequently in Brasília. Yet, explaining the concept to these individuals, many of whom did not use email or even know how to access a website on the Internet, was incredibly challenging, according to these three. The lack of knowledge about the issue made legislators particularly susceptible to the misinformation campaign spearheaded by Cunha and the telecommunications association *SindiTeleBrasil,* they argued.

In a glossy pamphlet distributed to legislators, *SindiTeleBrasil* declared that it wholeheartedly supported net neutrality as long as it did not restrict free enterprise and competition, define business models, or restrict providing *serviços diferenciados* (differentiated services) (*SindiTeleBrasil* 2013). However, providing differentiated services,

what has also been referred to as a creating an Internet fast lane, is incompatible with the concept of net neutrality because it means that corporations would be able to prioritize what content users could more easily access. In essence, *SindiTeleBrasil* used the term net neutrality, but defined it in a completely different way. Because many individuals still did not know what net neutrality meant, it was relatively easy for this lobbying group to mislead legislators and the public at large.

SindiTeleBrasil's president Eduardo Levy went one step further in attacking the concept of net neutrality when, on October 11th in an op-ed titled *Uma ameaça à inclusão* (A Threat to Inclusion) in the São Paulo newspaper, *Folha de São Paulo*, he called the net neutrality language of the MCI an "elitist project" because it would disincentivize telecoms from investing in infrastructure that needed to be built to reach poor neighborhoods. This, he argued, was a threat to the government's (read PT's) goal of reducing social inequality in Brazil (Levy 2013). This enraged activists, many like longtime PT militants Amadeu and Tiribiça, who had essentially dedicated their lives to decreasing the digital divide, the gap between the digital haves and have-nots. What was more worrying was that they knew that this rhetoric, however misleading and self-serving, would potentially influence a number of legislators, particularly those from the PT, who were still undecided on the issue.

In order to make clear what was at stake in the MCI, activists once again took to the streets. Ekman, Alimonti, Amadeu, and Tiribiça organized a protest in São Paulo at the Brazilian headquarters of Vivo, the country's largest telecommunications company and a subsidiary of the Spanish multinational Telefónica. They chose Vivo in part because its president Antônio Carlos Valente was the former president of *SindiTeleBrasil* and also because the company was foreign-owned, so it symbolically represented how the battle over Internet freedom was a global one that pitted activists like themselves against multinational corporations. *Bloqueio da Vivo: Por um Marco Civil da Iniciativa Popular* (The Blockade of Vivo: For a *Marco Civil* by Popular Initiative) took place on the rainy afternoon of October 16th when more than 60 activists descended on the plaza in front of Vivo's headquarters a matter of blocks from *Avenida Paulista*. The activists advertised the event on social media with the following language:

> Blockade of Vivo: Act Against Censorship on the Internet and for Liberty and Privacy Online.
>
> Telecommunication operators want to filter the network in order to impede our free access to sites and application where we share knowledge: archives, music, and movies. These corporations want to charge a lot for horrible high speed Internet service, they hope to break net neutrality, in other words, they want to interfere in the data that passes through their cables to increase their profits. We are against surveillance online and to impede the blocking, censoring, and breaking of our communication privacy. We need to pressure Congress to approve the *Marco Civil da Internet,* a bill that was democratically constructed, which aims to protect our liberty, privacy, and neutrality on the Internet. We are going to protest against censorship and the breaking of net neutrality (*Marco Civil Já* 2013).

Vivo had dismissed most of its employees earlier so as to avoid any problems leaving the building. In addition to the signs that activists held demanding an *Internet Livre* and *Marco*

Civil Já! (Marco Civil Already!), a group of activists also unfurled a large, neon yellow banner that said "Unfair Players." They charged that Valente and other telecom executives were *jogando sujo* (playing dirty) by hiring lobbyists to influence legislators and by making political campaign donations in order to influence politicians. They argued that these corporate actions threatened the democratic process, such as the one that led to the collaborative, democratic elaboration of the MCI. Ekman spelled out the stakes when he said at the protest, "The MCI defines communication as a right on the Internet, while [corporations] want communication to continue being only an object of commercial business." This protest highlighted the divide between a corporate vision for the Internet as a source for profit and one that activists promoted as a space for creative and civic engagement that is democratically governed.

On November 5, 2013, congressman Molon released an updated version of the bill, which activists felt attended to many of their lingering concerns, particularly in terms of issues related to copyright. Molon removed language supported by media corporations that would have allowed for a continued notice-and-takedown status quo. Instead, the debate about copyright would be saved for a bill specifically about copyright, which was already being debated in Congress. This essentially meant that media corporations, like Globo, would no longer try to scuttle the MCI due to objections about copyright policy, and instead would save their powder for another legislative battle. This meant that the only corporate lobby still working actively against the bill was the telecommunications sector. Activists pointed this out on a note published online on the *Marco Civil Já* Facebook page on November 7, 2013 in which they trained attention on the telecommunications lobby:

> Globo continues to be an enemy of freedom of expression, but it jumped off the boat and is no longer with the *teles* – the new text pushes the debate with Globo in the future to the reform of the *Lei dos Direitos Autorais* (Copyright law) and we will get there.
>
> But first, the *Marco Civil da Internet*:
>
> Our only enemies right now are the *TELES* – operators of telephones/telecommunications – who are represented by the congressman/lobbyist Eduardo Cunha (PMDB) and those who have been herded up by his pro corporate discourse.

This note evidences the way that activists had to navigate various corporate pressures in order to push their agenda forward, and it demonstrates the power that corporations exert in the liberal democratic system as it is currently constituted in Brazil.

Comissão Geral: Activists Occupy Congress

On November 11, 2013, in an attempt to break the legislative impasse that remained in the Chamber of Deputies because of Cunha's objections to the bill, the leaders of the chamber set aside an entire day for debate specifically about the MCI in a format called a *Comissão Geral*, or general commission. In fact, it was Cunha who requested this debate, potentially with the hope that his power in the congress would sway legislators to his position. This debate format was quite rare and activists saw this as an exceptional

opportunity to bring attention to their concerns – particularly the issue of net neutrality. The uniqueness of the *Comissão Geral* and the now high-profile status of the MCI meant that there would be significant media coverage as well. Furthermore, Internet freedom activists were extended unprecedented invitations to speak. Thus, Amadeu, Ekman, and Alimonti all planned to speak. While it might not have been his intention, by calling a *Comissão Geral,* Cunha was opening the doors for activists to cross the boundary that typically separated legislators from the public.

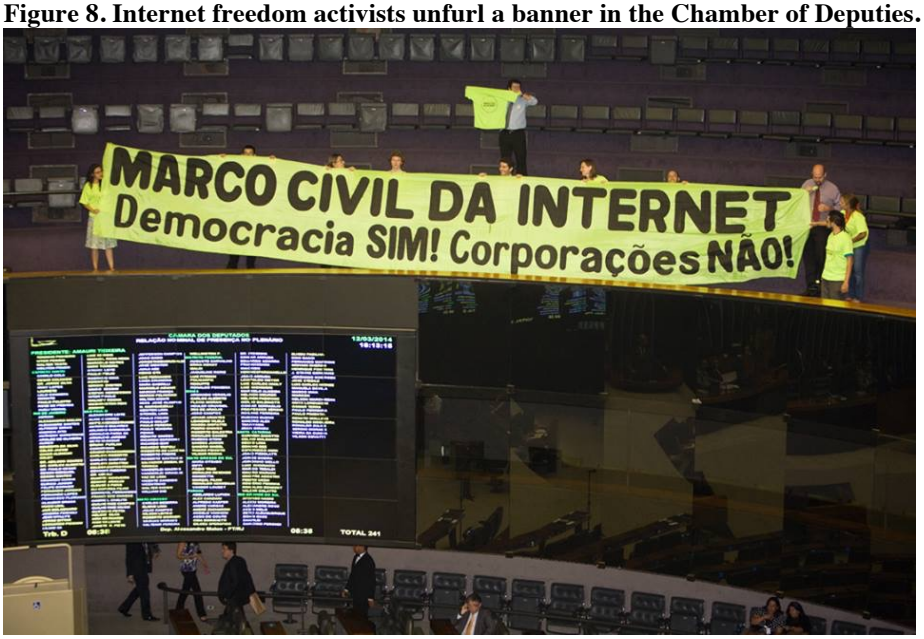
As soon as the news of the *Commissão Geral* was announced, the activist email listserv exploded with activity as people discussed speakers' strategies. Most believed, like Amadeu, that the most effective strategy would be to specifically target Cunha and depict him as the representative of telecommunications corporations. If they could tarnish him politically, they would strengthen their hand by decreasing the willingness of other politicians to follow Cunha. The day of the *Comissão Geral,* a number of activists armed with signs that read *Eu Defendo Democracia* (I Defend Democracy) congregated in the antechamber to the Chamber of Deputies to meet the legislators as they entered the legislative chamber. They then headed up to the balcony reserved for observers. As the speakers began speaking, they unfurled a banner that read *Marco Civil da Internet: Democracia SIM, Corporações NÃO* (Marco Civil da Internet: Democracy YES, Corporations NO). In between speakers the activists chanted slogans in favor of the MCI, such as *Internet Livre*.

In his speech to the chamber, Cunha embraced neoliberal economic theory and defended the need for private capital, particularly foreign private capital to build Brazil's Internet infrastructure. He misrepresented the concept of net neutrality by saying that it meant that companies would have to provide the same speed of Internet access to every house in Brazil for the same cost, which he said would not be a profitable venture and would disincentivize foreign investment. This incorrect, distorted version of net neutrality parroted *SindiTeleBrasil's* talking points. Cunha stated that what Internet freedom activists were trying to do was to "communize" the Internet. Paradoxically, however, he said that this law would favor US corporations like Facebook and Google, which few would accuse of promoting communism. His errors and justifications revealed that the interests that he was defending were those of multinational telecommunications corporations and that the politics of regulating a complex digital infrastructure were difficult given that legislators had little knowledge of how the technology functioned. Cunha advocated that the specific net neutrality language from the original bill created at the Ministry of Justice be substituted for Molon's current version that was the result of a public consultation, which had strengthened net neutrality protections. Because the language concerning net neutrality was weaker in the original bill, there would be more opportunities for the telecommunications corporations to exploit loopholes during the subsequent regulatory process, which Cunha wanted to be overseen by the Brazilian telecommunications agency ANATEL rather than by the Brazilian Internet Steering Committee. Activists considered ANATEL to be a government agency that had been captured by corporate interests, and thus could not be trusted to uphold principles of Internet freedom.

Speaking later in the day, Ekman placed the debate about the MCI within a larger, democratic framework. He said, "This house is going to discuss whether we are going to construct a society based on democratic principles, or an authoritarian society based on surveillance and private interests." At the end of his speech he directly engaged Cunha by

saying that if his party, the PMDB, opposed the current version of the MCI, it "would be placing itself against Brazilian society who constructed this bill." He invoked the rhetoric of participatory democracy and not so subtly contrasted it with the PMDB's history of making elite, political accords. As Ekman left the podium, a handful of politicians who supported the MCI unfurled the activists' banner on the chamber floor. Activists in the balcony began cheering and chanting in favor of the bill. Cunha was infuriated by the attack and took to the podium once again to respond. He scolded Ekman, a "guest" in the chamber, for criticizing the PMDB, which Cunha said represented a significant portion of Brazilians.

Figure 8. Internet freedom activists unfurl a banner in the Chamber of Deputies.



Brazilian Internet freedom activists unfurl a banner that reads "*Marco Civil da Internet*: Democracy YES! Corporations NO!" Photo from *Marco Civil Já* Facebook page.

While the large public debate was meant to break the legislative impasse, it was unsuccessful. Cunha and his allies in the Chamber of Deputies would not budge. Months of closed-door negotiations between Cunha and the administration would continue. Yet, the administration was unwilling to significantly alter the net neutrality language. Much as activists had earlier feared, Cunha used the MCI as a bargaining chip in order to extract concessions from the administration. He knew how important the MCI was to Rousseff's agenda, and he hoped to trade PMDB support for the bill in exchange for the appointment of more PMDB politicians to cabinet ministries. Rousseff remained resolute and was not willing to make such a transparent, high-level political trade. This type of political horse-trading is what activists felt was wrong with the Brazilian democratic system.

The fact that even in the wake of the president's designation of *regime de urgência* the bill did not pass caused great concern among activists who did not have close links to Rousseff as they had to Lula. Their threats as well as the fact that the president had been so public in her defense of net neutrality on the international stage, proved to be sufficient enough to ensure that the Rousseff administration was ultimately unwilling to bend.

Applying Political Pressure in the Halls of Congress

In the wake of the *Commissão Geral,* activists continued to apply pressure to politicians by making their presence felt in the halls of the national congress. According to the Brazilian constitution, because the Chamber of Deputies had not voted on the bill that had been classified as urgent by the administration practically all other business of the chamber had come to a halt. This strong opposition, enough to essentially shut down the legislature, demonstrates just how determined the telecommunications sector was to scuttle the bill. At this point, Barbosa, one of the journalists from *Intervozes* who was Brasília-based, took the lead in organizing activist mobilizations in the capital. Activists decided that applying pressure directly on legislators was essential to influencing them. Barbosa mobilized activists in Brasília to attend meetings with legislators to make their presence known in the halls of Congress. Activists took pictures with legislators who supported the bill and shared them on social media websites in an attempt to incentivize legislators to publicly voice their support. They also created a list online of the legislators that they called *Enemigos da Internet* (Enemies of the Internet), which included politicians who were against the law. These names were widely publicized online and citizens were urged to call or email the legislators to get them to change their mind. Wearing bright neon yellow shirts, their constant presence in the buildings of the Brazilian capital was meant to physically remind legislators that activists were paying attention to how representatives voted.

Barbosa also organized meetings with administration officials at the Ministry of Justice and Ministry of Culture in order to pressure them to remain firm in their commitment to the current version of the MCI. Activists were so nervous that the administration would make an accord with Cunha to alter the net neutrality components of the bill, that Ekman, Barbosa, and Alimonti drafted a letter declaring that Brazilian Internet freedom activists would withdraw their support for the MCI if strong net neutrality protections were stripped from the bill. Opposition from the individuals who were the driving force behind the creation of the MCI had the potential to kill the entire project.

> We understand that in the new proposal [of the MCI] the fundamentals of the bill have been shaken, impairing the effectiveness of some of the rights that are protected in the project, including: the right to the inviolability of the network and net neutrality, the right to privacy, and freedom of expression.
>
> We understand the importance of efforts to construct parliamentary majorities to support the text, but these efforts must not put at risk the fundamental principles of the law, something that we believe is happening . . . and which will compromise the support of the undersigned for the *Marco Civil da Internet*.

Activists then detailed what changes to the law they would not accept and why. They were willing to prepare for the possibility of scuttling the law because creating a law that condoned filtering of Internet traffic was so dangerous. They felt that once data filtering and Internet "fast-lanes" became the legal norm it would be even more difficult for activists to convince the public and policymakers that it was having negative effects. Thus, many activists believed that it would be better to have no law, rather than one that did not codify net neutrality. Since Rousseff had declared herself a defender of Internet freedom at the UN, the abandonment of Internet freedom activists in her own country, activists felt, would be an

embarrassment that the president would want to avoid. However, activists never had to release their letter, as Rousseff and her administration remained resolute in regards to rejecting Cunha's demands to alter the net neutrality language. Nonetheless, this episode shows how up until the very days before the vote on the bill activists were still largely in the dark about what might happen.

In March 2014, when a vote was considered imminent both by Molon's office and the administration, activists once again turned to an online petition in order to generate public support for the bill. This was a tactic that worked well in the past when they were fighting against the *Lei Azeredo,* because it demonstrated that a large number of Brazilians were concerned about Internet policy, not just a small group of dedicated activists. This time, they used the site Avaaz.org, whose Brazilian campaign director was now Pedro Abramovay who had helped draft the MCI at the Ministry of Justice. In addition to the support of extremely well known Brazilian actors Gregorio Duvivier and Wagner Moura, activists secured the support of former Minister of Culture Gilberto Gil as well as Tim Berners-Lee, the man credited with creating the World Wide Web. Social media websites were used to distribute images of these endorsers and their statements in support of the MCI. The images spread virally and thousands of individuals ended up signing the online petition. On March 25, 2014, activists delivered 10 boxes filled with printouts of the petition to members of the chamber. This symbolic act was meant to physically demonstrate the overwhelming number of individuals and organizations who supported the MCI. The underlying logic was that the MCI represented the will of the Brazilian people.

At this point, the pressure on Cunha and his allies to pass the MCI was so strong that continuing to block the bill could have led a dramatic rupture between his party and the PT. Rousseff's unwillingness to back down forced Cunha into a corner. On March 25, 2014, the same day activists delivered their petition, the bill was brought to debate on the chamber floor where it passed, almost unanimously. Seventeen members from a small opposition party voted against it because they felt it gave Rousseff too much power to determine Internet policy. Even Cunha ended up voting for the bill, despite the fact that he had previously excoriated its provisions as dangerous. He apparently did not want to go on the record as being against Internet freedom.

Activists were ecstatic at this point, and many in Brasília headed to a local bar to celebrate. At many points during the previous couple of years, activists had been fearful that the bill would die in the legislature and that their hard work would be for naught. Yet, on this day their struggle had paid off. A longtime FOSS militant named Anahuac drafted a statement and circulated it on the activist listserv that he administered. Other activists and organization quickly embraced and distributed it on the Internet. For them, it summed up their struggle and what it meant for the global Internet:

> The day when the world looked to Brazil:
>
> Today global democracy should look to Brazil and smile: the *Marco Civil da Internet* was approved. Never before, in the history of technology, was there such a powerful, creative and plural tool like the Internet, where the most diverse actors of society can relate to each other in a direct, dynamic, and frank manner.

> The Brazilian legislature, with massive encouragement from an organized and coordinated civil society, and with the backing of the federal government, studied – for more than 3 years – thousands of comments coming out of half-a-dozen public consultations, compromises, and hard political negotiations, to finally ensure a bill that is consistent with the human rights of privacy, freedom of expression and the principles of due process, legality, and, especially, net neutrality.
>
> The antagonistic powers were many and powerful, threatening to turn the biggest stage of cultural, intellectual, political and economic system into the equivalent of cable TV system. The rumormongering and misinformation tactics came to the point of accusing the *Marco Civil da Internet* to be an element of dictatorship and trying to curtail individual freedoms in the network. Utter nonsense.
>
> Among all actors – thousands of them – some stand out: the rapporteur House Representative Mr. Alessandro Molon and his team, members of the Brazilian Internet Steering Committee, President Dilma Rousseff with her fearless executive action in defense of the law. Add to that a long list of lawyers, academics and cyber activists, who relentlessly studied, made proposals, mobilized, and defended the *Marco Civil da Internet* in Brazil and abroad.
>
> This day will be remembered as the *Marco Civil da Internet* for the world. And we hope it serves as a model for all democracies that seek to strengthen freedom, human rights, and to build a more equal society. Its strength lies in being one of the few laws in the world that creates mechanisms to protect digital rights.
>
> This is the time of joy and to enjoy the feeling of accomplishment. Congratulations to Brazil and those who built and fought to ensure the free and open Internet.

Yet, while the victory in the Chamber of Deputies was undoubtedly a significant step, the bill was still not law because it still needed to be passed by the Senate before Rousseff could sign it into law. Activists were convinced that the momentum from their victory in the Chamber of Deputies in addition to the fact that the composition of the Senate made it more favorable to the administration meant that they would have little trouble. There was one concern. Should the Senate make any changes or amendments to the bill it would need to be debated once again in the Chamber of Deputies. This would mean that the corporate lobby would once again have a chance to block the bill. Thus, while a number of senators expressed interest in debating the bill and making alterations (some of which activists, in theory, supported, such as increasing user privacy rights), activists met with party leaders to make the case that the bill needed to be passed in its current state and quickly. This was necessary so Rousseff could sign it into law at the upcoming NetMundial Internet governance conference in São Paulo in April – which she had called for earlier in her speech at the UN. Thus, while activists traditionally supported democratic dialogue, they now worked to push the bill through as fast as possible with as little debate as possible. Barbosa rallied activists to put the same pressure on senators as they had previously done with deputies by remaining present at the National Congress and also delivering more boxes with the Avaaz.org petitions to legislators.

The bill passed the Senate in record time on April 22, 2014. This was less than a month after it was sent to the Senate from the Chamber of Deputies. The majority successfully blocked a number of amendments from the opposition that would have altered net neutrality. Similarly to what had happened in the Chamber of Deputies, despite a number of Senators being opposed to the language in the bill and speaking about how dangerous it was, the MCI passed the Senate unanimously. Again, while this unanimous vote was a victory for activists, it was also indicative of the way that the legislative system in Brazil is broken. The clear and intense divisions that exist in the chamber are opaque to the general public. Senators who had worked behind the scenes to scuttle the bill were still able to declare to their constituents that they supported it. This lack of transparency and accountability is a characteristic of the liberal democratic system. It is one of the driving factors that motivates Brazilian Internet freedom activists to use the Internet to create mechanisms for citizens to become involved in the political process so that they are more educated about the true positions of their elected representatives.

The *Marco Civil da Internet* on the Global Stage

On April 23, 2014, Rousseff signed the bill into law in São Paulo at the NetMundial – Global Multistakeholder Meeting on the Future of Internet Governance – a summit she had called earlier in the year in the wake of the revelations about NSA surveillance to reevaluate global Internet governance structures. Rousseff signed the MCI into law in front of a packed audience of international dignitaries – including some of the men who helped shape the Internet as we know it such as Vint Cerf, who helped promote the TCP/IP protocol in the 1980s, and and Tim Berners-Lee, who developed HTML in the 1990s. This act garnered coverage in the international press. Most Brazilian freedom activists were not invited to participate in the conference, which was primarily reserved for international representatives and high-level Brazilian representatives. Instead, they organized an alternative gathering called *Arena NetMundial*, which was spearheaded by Marcelo Branco who had consummate experience organizing activist events like FISL and *Campus Party Brasil*. At the time when the bill was signed, Lemos, Tiribiça, and Barbosa were on a panel discussing the MCI. When news reached *Arena NetMundial*, cheers leapt up from the audience. That afternoon, Amadeu celebrated on his Twitter account where he wrote, "We approved the most democratic Internet law on the planet day!" While the "we" in Amadeu's statement could be glossed as "Brazil" more broadly, a perhaps more apt reading would be that the "we" referred to the work of Brazilian Internet freedom activists who over the past five years had used a number of tactics to influence government policy and who had ultimately emerged victorious.

Conclusion - A Return to Participatory Democracy

Shortly after Rousseff signed the MCI into law, Amadeu and Branco participated in roundtable at FISL in Porto Alegre about the newly passed MCI. They celebrated the achievement of helping pass the most progressive Internet freedom law in the world. They noted that Lula had officially endorsed the idea five years earlier at this same free software conference. They were concerned, however, about how the law would actually be implemented by the government. The MCI stipulated that both ANATEL and the Brazilian Internet Steering Committee would regulate net neutrality. Given ANATEL's link to corporate interests, this was of great concern to activists. Additionally, corporations have the money and resources to follow and influence bureaucratic decisions in Brasília, something

that activists and social movements have a much more difficult time doing. Once again, activists turned to the notion of participatory democracy as a way to ensure that the principles of Internet freedom would prevail. They wanted to use a similar online, participatory system to create transparency in the regulation process so as to check the power of corporate interests. Indeed, the debate over the MCI had refocused attention on participatory democracy more broadly.

On May 23, 2013, President Rousseff announced at a large gathering in Brasília with representatives from social movements that the regulation of the MCI would be done via an online, interactive platform similar to the platform used to draft the language of the MCI. The presidential decree to make this happen was placed within a larger package to increase social participation in the governing process. Opposition parties, most notably the *Democratas* (DEM) party – one of the offspring of the military-sponsored ARENA party – came out forcefully against this popular participation initiative. This demonstrates how the MCI is part of a larger movement to increase citizen participation in democratic governance and to reshape the power structures of the Brazilian state. The elite forces that have been weary of direct political participation since the return to democracy in the 1980s continue to push back against initiatives aimed at broadening democratic participation.

In this chapter, I have illustrated how the logic of participatory democracy promoted by Brazilian Internet activists bumped up against the workings of a liberal democratic system that is still largely elite-controlled and highly influenced by corporations. The ability of corporations to put pressure on the legislative process demonstrates the extent to which the current Brazilian democratic system can be influenced by the interests of the elite. It is important to underscore that while Snowden's revelations about NSA mass surveillance were crucial to bringing Internet policy back to the center of political debate, the Rousseff administration would not have been able to so quickly embrace the MCI had it not been for the years of work of Brazilian Internet freedom activists. Furthermore, the contours of the final version of the bill might have been quite different if activists had not persisted in fighting for their positions, notably net neutrality. Ultimately, activists saw their victory not merely as successfully protecting Internet freedom, but also as part of a more long-term process to increase citizen participation in decision-making, and thus deepening the Brazilian democratic endeavor. However, as the legislative battle over the MCI demonstrates, merely creating mechanisms for citizen participation does not necessarily alter existing power structures.

CHAPTER 5

THE BRAZILIAN INTERNET STEERING COMMITTEE: NEGOTIATING NEOLIBERAL REFORMS AND THE DEMOCRATIZATION OF INTERNET GOVERNANCE

While the legislative battle over the *Marco Civil da Internet* discussed in the previous chapter centered primarily on debates about national Internet policy (i.e., net neutrality, digital copyright, and user privacy), it also involved a fundamental dispute about which Brazilian institutions should have jurisdiction over Internet policy and governance. In particular, Brazilian Internet freedom activists argued that the Brazilian Internet Steering Committee – a semi-governmental, multistakeholder national Internet policy advisory board – should be the institutional forum where these issues were discussed. Activists felt that its organizational structure made it more democratic and less beholden to corporate interests than ANATEL, which activists felt had been captured by the telecommunications lobby and was therefore a threat to an *Internet livre*. For these activists, strengthening the Brazilian Internet Steering Committee was a technique to promote a more democratic and participatory form of Internet governance.

On November 5, 2013, congressman Molon, the legislative sponsor of the *Marco Civil da Internet*, released an altered version of the bill in which he re-inserted text in Article 2 that explicitly gave the Brazilian Internet Steering Committee an official advisory role in determining technical reasons for exceptions to net neutrality.[14] He also inserted the following sections in Article 24 that represented an endorsement of the committee:

> Article 24. Guidelines for the actions of the Union, States, Federal District, and Cities in the development of the Internet in Brazil.
>
> I. The establishment of mechanisms of multiparticipatory (*multiparticipativa)*, transparent, collaborative, and democratic governance with the participation of the government, the business sector, civil society, and the academic community.
>
> II. The promotion of rational management and expansion of Internet use with the participation of the Brazilian Internet Steering Committee (Anon 2014).

When the new language was released activists engaged in a discussion on their listserv as they analyzed Molon's modifications to determine whether the changes were positive or negative, and they quickly fixated on these two important changes. One activist wrote, "Article 24 was elected my favorite!" while another called the article, "Top," – Brazilian slang for awesome. The formalization of the role of the Brazilian Internet Steering Committee was important for activists because it effectively meant that Internet governance role would not be entirely ceded to ANATEL.

In this chapter, I examine the history of the Brazilian Internet Steering Committee since its creation in 1995. I argue that the evolution of the Brazilian Internet Steering

[14] According to the text, permissible exceptions to net neutrality could potentially include network management (i.e., combatting SPAM email), and prioritization of emergency services.

Committee, a national Internet policy advisory board, demonstrates how Brazilian Internet freedom activists negotiated the neoliberal restructuring of the state during the 1990s in such a way as to construct an institutional mechanism to defend against total corporate capture of Internet governance. The creation of this semi-governmental, multi-stakeholder organization with representatives from the government, business, and academia was undertaken in the lead-up to the privatization of the telecommunications sector by the Brazilian government. However, it was done so at the insistence of the country's Internet pioneers in hopes of preventing telecommunications corporations from dominating Internet governance. Institutional reforms implemented in 2003 at the behest of Internet freedom activists created new positions on the committee for elected representatives from non-profits and NGOs. This exemplified the efforts by activists to further democratize Internet governance by opening participation to more sectors of society. Ultimately, the development and strengthening of the steering committee represents a unique tactic by which Brazilian Internet freedom activists are carving out an important institutional platform that is not corporate-dominated and through which they believe they can defend the Internet as an open, public platform for creative and civic engagement.

At the same time, whether or not the multistakeholder governance model employed by the committee will inherently lead to more democratic and socially equitable policy is not entirely clear. The fact that the Brazilian Internet Steering Committee has endorsed policies advocated by Internet freedom activists is at first glance surprising given that telecommunications corporations have a representative on the 21-member committee and committee decisions are supposedly made by consensus. Indeed, the multistakeholder model gives veto power to non-elected corporate representatives who are not accountable to voters. I contend that the success of Internet freedom activists has up until now been largely due the fact that the entities that opposed the activist agenda (i.e. telecommunications corporations) at times ignored the committee because they believed that real power ultimately resided elsewhere, primarily in the legislature and ANATEL. Indeed, before passage of the *Marco Civil da Internet* the actual power of the committee was unclear as there was no clear-cut government framework of how the Internet would be regulated in Brazil. Moreover, a small group of technical experts who advocate for an *Internet livre* continues to retain an outsized influence in setting the agenda of the steering committee. Their enduring power raises questions about whether or not all Internet freedom activists are equally committed to radically opening up the governance process to include more people and organizations. These governance issues highlight some of the potential pitfalls of the current multistakeholder model of Internet governance in Brazil. The rhetoric of participation and redistribution of power often invoked by Internet freedom activists who support the Brazilian Internet Steering Committee model may not be matched in practice.

The ethnographic data from this chapter comes from my interviews with a number of Brazilian Internet Steering Committee members as well as with the handful of individuals who work at its secretariat in São Paulo and its associated institution the Brazilian Network Information Center (*Núcleo de Informação e Coordenação do Ponto BR*, or NIC.br). Principal among those interviewed were electrical engineer Demi Getschko and former political exile Carlos Afonso who were instrumental in connecting Brazil to the Internet in the early 1990s and who subsequently had a foundational role in conceptualizing the Brazilian Internet Steering Committee. Also important to note are interviews with FOSS militant and professor of sociology Sergio Amadeu and lawyer Veridiana Alimonti from the

non-profit IDEC, who were both protagonists in the fight for the *Marco Civil da Internet* and who used their positions on the committee as a platform to promote Internet freedom. In 2013, I also participated in the third *Fórum da Internet* held in Belém, Pará. This conference is organized by the steering committee's secretariat to discuss Internet policy and attracts hundreds of individuals annually. By attending this conference, I was able to experience first-hand the ways that activists mobilized.

I first begin this chapter with a discussion of how the Brazilian Internet Steering Committee emerged during the neoliberal restructuring of the Brazilian state in the 1990s. Then, I show how elements of participatory democracy were introduced into its structure in the early 2000s during the Lula administration. Then, I shift to how the steering committee became a site for Internet freedom activism, and how this, in turn, put its existence in peril as corporations lobbied for its elimination. Finally, I return to how the organization gained political legitimacy and power with the passage of the *Marco Civil da Internet* and I argue that this impeded, at least temporarily, corporate capture of Internet governance in Brazil. Ultimately, the case of the Brazilian Internet Steering Committee provides one example of how Brazilian Internet freedom activists have applied theories of participatory democracy in hopes of developing more socially equitable Internet policy. However, it also highlights the ways that increased forms of participation that gloss over class and power inequities can be incorporated into neoliberal governance models that essentially weaken state power and potentially strengthen the role of corporations in public life. In this light, the long-term efficacy of the multistakeholder model of governance to defend against neoliberal capture of the Internet may be illusory.

Neoliberal Reforms and the Formation of the Brazilian Internet Steering Committee

The original creation of the Brazilian Internet Steering Committee in 1995 demonstrates how Brazilian Internet freedom activists negotiated neoliberal reforms of the Brazilian state. Neoliberal reforms in Brazil began in 1990 under the first directly elected president after the end of the dictatorship, Fernando Collor de Mello (PRN). These reforms, popularly referred to as the Washington Consensus, resulted in the privatization of public resources and the reconfiguration of state power. A central argument of neoliberal proponents was that the private sector could more efficiently manage and distribute resources, and thus control of certain sectors of the economy should be ceded to private capital in order to promote economic growth (Harvey 2005). In Brazil, one of the largest sectors slated for privatization was the telecommunications sector that was then controlled by the state-owned corporation Telebrás, which was created in 1972 during the military regime. The drive to privatize briefly stalled after Collor de Mello's impeachment on corruption charges, but was restarted in earnest by President Fernando Henrique Cardoso (PSDB) at the beginning of his term in 1995. In order to privatize Telebrás, a constitutional amendment was passed the same year that would legalize the transfer of this state-owned sector to the private sector. Three years later in July 1998, Telebrás was finally broken up and sold as 12 separate regional telecommunications companies. As the process of privatization slowly unfolded during the Collor de Mello administration, individuals like Getschko, Afonso, and others who were involved in extending the Internet to Brazil paid close attention. This is because the Internet depends on the telecommunications infrastructure to connect computers to the network. Whoever owned and controlled the telecommunications network would have an overwhelming impact on the development of this emerging computer network. Individuals

involved in spreading the Internet in Brazil recognized the impact that privatization of the telecommunications industry most likely would have.

Change in the telecommunications sector was not something that was seen as necessarily bad for the Internet. It is important to remember that the state telecommunications monopoly Telebrás had been an initial impediment to the extension of the Internet to Brazil in the early 1990s. Telebrás endorsed the x.25 networking protocols promoted by a number of state telecommunications corporations worldwide that relied on a centralized network as opposed to the decentralized TCP/IP standards on which the Internet is based. Both Getschko and Afonso had flouted government policy when they created the first Internet connections. These Internet pioneers in Brazil had been actively working against the policy of Telebrás and hoped to change its policy. Thus, the question was not whether there needed to be change to help the Internet develop, but rather what changes needed to be made. There was a consensus among these individuals that private telecommunications companies did not understand the hacker vision of the Internet and were more likely to support a centralized vision of a global computer network.

Afonso argued that the Internet and telecommunications were not synonymous. Instead, the Internet was a *serviço de valor adicionado* – a value added service – that utilizes telecommunications infrastructure to function. Afonso was joined in this opinion by computer science professor Tadao Takahashi, who helped create the National Research Network (RNP) that connected universities to the Internet, and professor Ivan Moura Campos, who led the National Council for Scientific and Technological Development (CNPq) of the Ministry of Science and Technology which invested heavily at that time in developing the Internet in Brazil. These two men were instrumental in helping to invest in the technological infrastructure needed to further extend the Internet in Brazil. In essence, these individuals felt that the Internet was so different from past telecommunications technologies – like telephones, radio, and television – that it should be treated differently. In 1995, these individuals lobbied the Ministry of Communications, the ministry that was overseeing the privatization process, to officially recognize the distinction between the Internet and telecommunications.

The Minister of Communications, Sérgio Motta (PSDB), was ultimately the final arbiter in the decision about how the Brazilian government would handle Internet regulation. Motta had been President Cardoso's campaign manager when he successfully ran for president in 1994, and was one of Cardoso's most trusted advisors (Adachi 2011). Motta was an industrial engineer by training who had first become politically active in the 1960s as a member of *Ação Popular*, a moderate student organization associated with the Catholic Church that worked to end the military dictatorship. In those days, he became friends with Betinho, Afonso's colleague at Ibase, the NGO they co-founded upon their return from political exile. After the return to electoral democracy, he was one of the founding members of the PSDB, the party most closely associated with neoliberal reform in Brazil. His endorsement of neoliberalism was one of the reasons that Cardoso chose him to oversee the privatization of the telecommunications sector. His history as being part of the pro-democracy student movement made it easier for Afonso, Betinho, and others to gain his ear to argue that telecommunications and Internet regulation should be separated.

In 1995, Motta issued a ministerial declaration titled *Uso de Meios da Rede Pública de Telecomunicações para Acesso à Internet, Norma 004/95*– The Use of The Public Telecommunications Network to Access the Internet, Rule 004/95 (Ministério de

Comunicações 1995). This document, commonly referred to simply as *Norma 4,* classified the Internet as a *serviço de valor adicionado*, just as Afonso and others had wanted. This meant that the Internet would not be treated as a telecommunications service and would not be dealt with in the process of the privatization of the telecommunications sector. Also, this new ministerial level declaration prevented Telebrás from becoming an Internet service provider (ISP). Motta reasoned that excluding Telebrás from the market would create an incentive for the private sector to provide this service, particularly small businesses (Adachi 2011). Indeed, a number of small ISPs, such as Nelson Lago's "That's Internet!," detailed in the first chapter, did spring up in the mid-1990s, largely as a result of this policy. In the short term, this represented a victory for Brazil's Internet pioneers because by insulating the Internet from telecoms, as technical experts they would continue to have significant sway over the future path of Internet development in Brazil. While *Norma 4* did not specifically mention the Brazilian Internet Steering Committee, among many committee members and individuals who worked at the committee's secretariat, *Norma 4* was considered fundamental to the current organization of Brazilian Internet governance in which the committee is central.

The document that gave birth to the Brazilian Internet Steering Committee, which was issued almost simultaneously in 1995, was an inter-ministerial agreement between the Ministry of Communications and the Ministry of Science and Technology titled *Portaria Interministerial N° 147* – Inter-ministerial Ordinance 147 (Ministério de Comunicações and Ministério de Ciência e Tecnologia 1995). This document, signed by Sérgio Motta and his counterpart José Israel Vargas, enumerated the responsibilities of the committee, which included recommending Internet standards, coordinating the distribution of IP addresses and .br website domain names, collecting and distributing information about Internet use in Brazil, and recommending network management procedures. Additionally, it specified the composition of the committee. There would be one representative from each of the following institutions that would serve a two-year term: the Ministry of Science and Technology, the Ministry of Communications, Telebrás, the National Research Network, and the National Council for Scientific and Technological Development. Also one representative from each of the following sectors would sit on the committee: the academic community, the business community, the ISPs, and the community of Internet users. Importantly, the Ministry of Communications and the Ministry of Science and Technology would jointly nominate all of the representatives. The document also stipulated that the representative from the Ministry of Science and Technology would be the coordinator of the committee. This was Afonso's "pluralist" model.

For Brazil's Internet pioneers, this arrangement was important because it allowed them a number of seats at the table of the advisory board so that they could continue to influence Internet policy and governance. Afonso, Tadao Takahashi, and Ivan Moura Campos were all original appointed members of the committee. Demi Getschko joined six months later as a representative of the technical community. The voices of these technical experts who spearheaded efforts to extend the Internet to Brazil would continue to shape its future expansion.

At this point in 1995, the parallel process of privatizing the telecommunications sector was still in process. Left-wing opposition parties, such as the PT, vehemently opposed the neoliberal privatization agenda, but were unable to muster the political forces to stop the reforms. When privatization did occur in 1998, the Cardoso administration created

ANATEL. Thus, a division of labor was envisioned where ANATEL would regulate the telecommunications sector and the Brazilian Internet Steering Committee would serve as an advisory board for Internet governance. This division was largely the result of individuals like Afonso, who had lobbied to separate the Internet from telecommunications. This division would be crucial for Internet freedom activists in years ahead as they continued to fight against corporate efforts to dominate Internet policy and governance.

Participatory Democracy and Institutional Changes at the Brazilian Internet Steering Committee

Lula da Silva's rise to the presidency in 2003 represented the launching of a new national political project focused on social inclusion and popular participation that would have considerable, long-term effects on the contours of Brazilian Internet governance. In particular, the PT's history of supporting participatory democracy initiatives that incorporated broader sectors of society into policymaking processes would become reflected in the changes Lula's government would make to the Brazilian Internet Steering Committee. The number of Brazilian Internet users and webpages had grown significantly in the late 1990s and early 2000s, which meant that it was of increasingly greater concern to policymakers and legislators. Even before he took power in 2003, individuals involved with the Brazilian Internet Steering Committee, like Afonso and Amadeu, were looking for ways to preserve the institutional setup that they had helped create during the Cardoso administration, but whose permanence was considered far from consolidated. Afonso stated in an interview that there was fear among some involved that the Brazilian Internet Steering Committee would be disbanded entirely and turned over to the private sector, or that its role would be transferred to an entirely state entity. The president's technology policy was still being defined and no one knew whether Lula's call to strengthen the state in the wake of the neoliberal reforms of the 1990s would include getting rid of the multi-stakeholder Internet governance model. Thus, this political transition represented a potential risk to the committee's model of Internet governance.

In order to defend the committee, members like Afonso and Getschko lobbied to get the new administration to officially recognize the organization. They were now joined in lobbying by the FOSS and PT militant Sergio Amadeu, who had been appointed by President Lula to lead the *Instituto Nacional de Tecnologia da Informação* (National Institute for Information Technology, or ITI). In his capacity of president at ITI, Amadeu also served as the representative from the President's Office (*Casa Civil*) to the Brazilian Internet Steering Committee. Along with Afonso and others from civil society, Amadeu pushed not only to get the committee officially recognized by a presidential decree, but also to create a system whereby non-governmental committee members are elected rather than appointed by the government. Ultimately, the goal was to increase the participation by various sectors in determining Internet policy and governance.

In September 2003, President Lula issued *Decreto #4829*, which recognized the role of the Brazilian Internet Steering Committee and instituted governance mechanisms in hopes of increasing its democratic characteristics. The document repeated verbatim much of the language from the *Portaria Interministerial N° 147* from 1995 that created the committee and delineated its powers. However, it also increased the total number of representatives from 12 to 21 and detailed new steps through which non-governmental representatives would be elected through an electoral college of entities within their specific sectors. This was

important for two reasons. First, the number of government representatives now stood at 10. This meant that the government no longer had a clear majority on the committee, although the representative from the Ministry of Science and Technology would still always be the designated committee coordinator. Secondly, new slots were created for non-governmental representatives. There would now be three representatives from academia, four from the private sector, and three from the so-called *terceiro setor* – the third sector – which refers to the non-profit/NGO sector. For activists, these slots for the *terceiro setor* were particularly important because they created more positions for NGOs and social movements to participate in committee decision-making. Indeed, while business also benefited from an increased number of representatives, the inclusion of more non-profit/NGO representatives was quite important to activists because they felt that it gave them more alliances to leverage on the committee.

Electing members as opposed to having them all appointed by the government was understood as a significant step in democratizing Internet governance. The elections would be conducted via a website, which was thought to make the process more accessible and transparent. The then-coordinator of the committee and representative from the Ministry of Science and Technology, Arthur Pereira Nunes, declared in a newspaper interview that civil society was "going to use the Internet in order to democratize the Internet" (Folha de São Paulo 2004). However, elections were not open to the public, but were limited to government-recognized institutions that were divided based on the sector they were considered to represent. For example, voting for representatives from the *terceiro setor* was limited to organizations considered to be a part of the *terceiro setor*. In this way, while participation was broadened, it was still highly circumscribed. Nonetheless, for activists associated with organization in the *terceiro setor,* it created new spaces for them on the committee to voice their concerns.

One of the first elected representatives from the *terceiro setor* in 2003 was Mario Teza, the labor union organizer and FOSS activist described in chapter one who helped found FISL in Porto Alegre in 2000. He represented the *Projeto de Software Livre*, the organization that promoted FOSS and organized the annual free software conference. Because FOSS and the Internet are two technologies that are so closely entwined, hackers wanted a space on the committee to advocate for their vision of the Internet and how it should be approached as a technology. At the time, he stated as a representative of the free software community, his goal was to "broaden democratic space on the Internet. This means this mandate will be at the service of popularizing the topic of 'governance.' For this ideas like an Internet conference, seminars, and tutorials will be important" (Teza 2003). This desire demonstrates how notions of participation and democracy were now becoming central to discussions that would take place at the committee. Carlos Afonso, who had served on the committee for two years when it was created in 1995, once again joined the committee, this time as a representative of the *terceiro setor*. The spaces created by Lula's decree for representatives like Teza and Afonso altered the committee's agenda by bringing new concerns to the fore.

Brazilian Network Information Center (NIC.br): Internet Pioneers Take the Helm

While the reforms of the Brazilian Internet Steering Committee were meant to broaden citizen participation, a small number of science and technology experts retained outsized influence in shaping the committee's agenda and policy. In particular, the Brazilian Internet pioneer, Demi Getschko, who in 1992 oversaw the first Brazilian connection to the

global Internet, enjoyed increased power when, he founded NIC.br in 2005. Getschko's organization registers all websites with a .br domain name, performs research on Brazilian Internet use, monitors network security threats, and coordinates infrastructure projects related to network expansion. Before NIC.br was created, these tasks were performed by FAPESP, the large state-financed research foundation that had spearheaded initial efforts to connect Brazil to the Internet in the early 1990s under Getschko's leadership.. The growth of the Internet, however, meant that this task was increasingly big and it diverged from FAPESP's primary education mission. Thus, Getschko helped create NIC.br in December 2005, where he has been president ever since.

The legal charter of NIC.br defines it as an independent, non-profit organization. Its primary mission is to implement the policies of the Brazilian Internet Steering Committee and many of the positions on its board of directors are reserved for steering committee members. Furthermore, Getschko was appointed to the steering committee in his capacity as an Internet expert. In fact, in addition to incorporating more representatives from non-profits and NGOs, Lula's decree also created a *Notório Saber* representative on the committee who is appointed by the Ministry of Science, Technology, and Innovation. The position is reserved for a highly esteemed individual with technical expertise. Getschko, often referred to in the press as the "father of the Brazilian Internet," has served in this position since 2004. The fact that he is the president of NIC.br and has a position on the committee makes him extremely important. It shows the way that one of Brazil's Internet pioneers has continued to exercise outside influence on shaping Internet policy.

Since 2005, the secretariat of the Brazilian Internet Steering Committee and the office of NIC.br have been located on the sixth and seventh floors of a tony high-rise in the Berrini commercial district of São Paulo, which is also home to the Brazilian headquarters of multinational technology corporations such as Google, Facebook, and Microsoft. The fact that these offices are located in São Paulo, as opposed to the capital Brasília where one might expect a national advisory board to be located, is another reminder of how both organizations strategically distance themselves from being conflated with the Brazilian government. Each month in a conference room here, the 21 steering committee members meet to discuss issues related to Internet policy. All committee decisions must be approved by consensus. The office of the Executive Secretary of the Brazilian Internet Steering Committee, physicist and former FAPESP administrator Hartmut Glaser, is right down the hall from Demi Getschko, the president of the NIC.br. The individuals who hold the highest positions in these two organizations are from the community of science and technology researchers that was central to the expansion of the Internet in Brazil. In between their two offices are the offices of the steering committee's permanent secretariat, which is composed of a handful of experts in Internet and technology issues. Members of the secretariat conduct research at the committee's request, help guide the committee's agenda by pointing out timely issues to be discussed, and take care of administrative tasks. The rest of the space is occupied by the various departments of NIC.br branches and by Internet-related NGOs like the World Wide Web Consortium of Brazil (W3C) and the Internet Society of Brazil (ISOC-BR) that help set global Internet protocols and standards. In total, on these two floors there are more than 100 people working for these organizations that help shape Internet policy and governance.

The institutional boundary between the Brazilian Internet Steering Committee and NIC.br is quite blurry. Indeed, to many outsiders and even individuals who work at one of the organizations, the difference is not entirely clear. Both share the same office space and

source of funding. The fees charged to individuals and organizations that purchase .br domain names for websites entirely fund the organizations. With the increase in the number of Brazilian webpages in the past 15 years, the money collected from these fees is significant. This makes the organizations completely financially independent, and thus not subject to the demands of any outside funders or the government. The blurred boundaries between the Brazilian Internet Steering Committee and NIC.br have created tension between efforts to increase participation through elections to the steering committee's board and attempts to preserve the influence of individuals at NIC.br and who see themselves as Internet caretakers.

The *Decálogo*: The Ten Commandments of the Internet

In the past five years, the Brazilian Internet Steering Committee has passed resolutions supporting policies that are fundamental to activist conceptions of Internet freedom. By far the most important of these was *Resolução CGI.br/RES/2009/003/P* in 2009, which has unofficially been called the *Decálogo* – the Ten Commandments – because it is a list of ten policies the committee considers imperative for the ideal functioning of the Internet. Examining the long process through which this resolution was crafted, the deep internal committee divisions it exposed, and how it was adopted in spite of significant opposition demonstrates how the steering committee operates, and how Internet freedom activists have successfully turned it into a platform from which to promote their agenda.

The impetus to create the *Decálogo* was a number of judicial rulings that attacked Internet freedom. The most notable of these cases occurred in 2007 when a Brazilian judge ordered that Google's video-sharing website, YouTube, be entirely blocked from Brazil because the company refused to remove a video of television host and model, Daniela Cicarelli, seeming to engage in sexual intercourse with banker, Tato Malzoni, on a Spanish beach that was filmed by a papparazo. The judicial ruling gained worldwide attention. Removing the entire website, one of the most trafficked worldwide, because of one controversial video filmed in a public place, was clearly excessive. Mario Teza put it this way: "Brazilian Internet users should not be punished for an individual squabble. Cicarelli and her boyfriend have every right to defend their rights, but the judiciary should not punish the entire Brazilian Internet community" (Teza 2007).

Steering committee members, and in particular, Getschko, because of his status as one of Brazil's Internet experts, were often asked by journalists and policymakers their positions on these types of rulings and policies. He became tired of having to repeatedly explain to people the technical aspects of how information is shared via the decentralized Internet. Also, at the same time the debate about the cybercrimes bill, the *Lei Azeredo,* was heating up as Internet freedom activists were mobilizing to have the bill defeated in Congress. In this context, it became apparent to Getschko and others that a document should be created that would give guidance to policymakers and judges about the fundamentals of how the Internet is configured and what policies would best preserve its open and decentralized nature. In essence, it would encapsulate their vision of the Internet in a way that was easy to understand for others. Getschko worked closely with Afonso on drafting such a document. They did so in consultation with fellow committee members over the span of two years. Often times these discussions took place during committee meetings, but they also were done on the sidelines and in personal communications among committee members.

The final document they created is notable because it reinforced the idea of the Internet as a democratic and collaborative platform:

> Principles for the Governance and Use of the Internet
>
> 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 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) Universality
> 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.
>
> 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) 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.
>
> 7) Non-liability 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.
>
> 8) 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 and 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 (*Comitê Gestor da Internet no Brasil* 2009).

Yet, while this resolution was eventually passed by the Brazilian Internet Steering Committee in 2009, it was actually quite contentious and faced opposition from representatives of the telecommunications sector. In particular, they did not agree with principle number 6 regarding net neutrality. According to committee members, this was a serious roadblock. However, Getschko, Afonso, Teza and others were not willing to remove this principle in order to pass the resolution. For them, the concept of net neutrality was so fundamental to the Internet as a democratic platform that it would be wrong to remove it.

According to committee members and individuals who work at the secretariat and NIC.br and with whom I spoke, all resolutions passed by the steering committee are passed by consensus. In theory, this means that the committee speaks with a unified voice and that committee members are in agreement. However, the case of the *Decálogo* demonstrates that the concept of consensus is itself a contentious term. The representative of the telecommunications sector and president of the telecommunications lobby *SindiTeleBrasil,* Eduardo Levy, was opposed to the inclusion of the concept of net neutrality even though the majority of the committee endorsed it. Ultimately, rather than continuing to block the resolution the representative who opposed it, Levy, merely abstained; he did not attend the meeting at which the resolution was approved. Nonetheless, individuals like Afonso and Getschko contended that the resolution was passed by consensus, or at least near consensus. For them the passage of this resolution was an example of how the multi-stakeholder model of deliberation among many sectors would produce policy that was beneficial to the public interest. Indeed, the passage was a massive victory for those advocating for Internet freedom. Carlos Afonso referred to it as a *gol de placa*, which is Brazilian soccer parlance for a goal that is so beautifully executed that it merits its own trophy. The passage of the *Decálogo* by the Brazilian Internet Steering Committee gave the policy document imprimatur of multi-stakeholder support and it gave Internet freedom activists a document around which they could rally.

The passage of the *Decálogo* in 2009 took place at the same time as activist efforts to defeat *Lei Azeredo* had given way to demands to create an Internet freedom bill – the *Marco Civil da Internet* (MCI). Thus, the *Decálogo* was fundamental to shaping the original outline of the Internet bill of rights that activists were working on alongside the Ministry of Justice and Ministry of Culture, as detailed in Chapter 3. For example, lawyer and open source activist Guilherme de Almeida, from the Ministry of Justice, reached out to the steering committee, and Getschko in particular, in order to help guide this process and to give input as an Internet expert. In large part because of the *Decáologo,* the steering committee, as an institution, was now perceived as an organization working to defend Internet freedom.

In 2011, Congressman Alessandro Molon (PT) began promoting the MCI in Congress. He made an addition to the bill by including the Brazilian Internet Steering Committee. Under the change, the steering committee would dictate the circumstances under

which the policy of net neutrality could be disregarded in cases of an emergency or for technical reasons. In this way, the committee as an institution became fundamentally associated with the goals of Internet freedom activists. When individuals like Getschko, Afonso, Teza, and others gave interviews, they almost always mentioned their position on the committee, which reinforced the idea that the multi-stakeholder committee had reached a consensus on these issues. Yet, while rhetorically employing the committee as a supporter of Internet freedom lent the cause symbolic power, it also made the committee a target by forces opposed to portions of the MCI. Indeed, the battle over the MCI became intrinsically linked to the future of the Brazilian Internet Steering Committee itself since the committee was now mentioned explicitly in the bill.

Attempts to Sideline the Brazilian Internet Steering Committee

When the telecommunications representative Eduardo Levy did not attend the meeting at which the *Decálogo* was approved, this was not a sign that the telecommunications sector had given up the fight against net neutrality. Instead, it had become clear that the steering committee was not a friendly territory for their vision of the Internet. Instead, the telecommunications corporations continued lobbying in other venues, principally at ANATEL, the Ministry of Communications, and in the halls of congress. In this way, they appeared to be pursuing a strategy that would either neutralize the power of the steering committee or get rid of it entirely. Since the steering committee had become so closely aligned with the objectives of Internet freedom activists, it posed a threat to the objectives of multinational telecommunications corporations.

The work to delegitimize the committee intensified after the transition from the Lula administration to the Rousseff administration at the beginning of 2011. The new Minister of Communications, Paulo Bernardo (PT), the man that Internet freedom activists dubbed the *Ministro das Teles* (Minister of the Telecoms) because his positions aligned so closely with those of telecommunications corporations, became a member of the steering committee between 2011 and 2013. Yet at this same time, he publicly challenged the jurisdiction of the committee. In an interview with a Brazilian technology magazine about the MCI, the minister noted that mention of the Brazilian Internet Steering Committee had been removed from the bill in regards to its jurisdiction to regulate net neutrality at the request of the government. He contended that since the steering committee is not a state organization, it should not participate in setting policy:

> We think that a presidential decree or regulation by ANATEL represents an instrument elaborated by the Brazilian state with rules about transparency, open financial accounts, public consultations, and dialogues with specific sectors… The Brazilian Internet Steering Committee is not a state entity. It does not have public servants, it does not have the same governance rules as ANATEL…[at ANATEL] you have Brazilian-senate approved appointees with appropriate technical backgrounds. ANATEL is the organization that has the competency to [regulate net neutrality] (Bernardo 2011).

The notion that ANATEL was more transparent than the steering committee was a direct challenge to supporters of the steering committee and individuals who worked at the committee's secretariat and NIC.br who felt the opposite. Furthermore, the idea that

ANATEL should regulate the Internet stood in stark contrast to the *Norma 4* of 1995 that explicitly stated that the Internet was not a telecommunications service and should not be regulated as such. In effect, Bernardo was questioning the entire jurisdiction of the steering committee of which he was himself a member.

At the request of the Ministry of Communications, in 2011 ANATEL began a process to revise *Norma 4*. In particular, the agency wanted to alter it so that the Internet would be considered a telecommunications technology and could thus be regulated by ANATEL. The agency's then-director, Ronaldo Sardenberg, and its vice-director and close ally of Bernardo's, Jarbas José Valente, would oversee the process of revising *Norma 4*. The goal of this was to increase ANATEL's regulatory power, which would in effect reduce the authority of the Brazilian Internet Steering Committee; Internet governance decisions would be made at ANATEL as opposed to the steering committee. Considering the fact that ANATEL's policies often were closely aligned with those defended by the telecoms, this was particularly concerning to Internet freedom activists who understood this move as an attempt to unilaterally end the debate in the Brazilian congress about Internet policy and governance embedded in the MCI.

In response to efforts by the Ministry of Communications and ANATEL, the Brazilian Internet Steering Committee released a resolution opposing ANATEL's attempt to both disregard *Norma 4* and circumvent the debate about Internet policy taking place in the Congress in the form of the MCI. In *Resolução CGI.br/RES/2011/004/P* the committee reaffirmed its position on the nature of the Internet as a *serviço de valor adicionado*, the committee's jurisdiction based on previous government decrees, and its belief for the need of increased participation in Internet policymaking. This concluding portion of the resolution captures these positions:

> Reaffirm the understanding that Internet connection service is a value-added service, which should not be confused with the telecommunications network that supports it.
>
> Reaffirm that, notwithstanding always-necessary revisions and updates to the existing situation, considering the concepts provided in Rule 4/95 [*Norma 4*] of the Ministry of Communications, essential to a proper understanding of the nature of the services required for the development of the Internet…
>
> Reaffirm its commitment to a better and more inclusive Internet, expressing the need for the involvement of Brazilian Internet Steering Committee in dialogue and debate on issues relating to the Internet and related matters, in the spirit of the provisions of the Decree of its creation (Comitê Gestor da Internet no Brasil 2011).

The fact that the committee needed to issue a resolution defending its own existence demonstrates the perilous situation its defenders felt they were in. Hartmut Glaser, the executive secretary of the secretariat and a committee member himself, said in an interview that the release of the resolution was delayed because of "diplomacy with ANATEL," which had originally blocked the resolution (Aquina and Jordan 2011). Surprisingly, in this instance, representatives from the telecommunications sector supported the resolution because they contended it would ensure competition among Internet service providers (ISPs). However, down the line they would continue to support initiatives that would strengthen

ANATEL at the expense of the steering committee. In many ways, this vote was an aberration.

Not all sectors of the Rousseff administration supported the de-legitimization of the committee. For example, in 2011 the new representative from the Ministry of Science, Technology, and Innovation, Virgílio de Almeida, was a strong defender of the committee. As the representative from the ministry, he was by default the committee's chairperson. A computer science professor from Belo Horizonte and PT member, Almeida was the director of the ministry's *Secretaria de Política de Informática* (Department of Information Technology, or SEPIN). Among the many IT-related issues this department handles, one of them is administering the *Rede Nacional de Ensino e Pesquisa* (RNP) – the National Education and Research Network – which is the backbone for national academic Internet networks and connections. Likewise, since the Ministry of Science, Technology, and Innovation helped create the Brazilian Internet Steering Committee via *Portaria Interministerial N° 147* in 1995, the ministry was far less willing to cede jurisdiction of the Internet to ANATEL, which would in effect give more control over Internet policy to the Ministry of Communications. The fight over revisions to *Norma 4* was thus very contentious within the Rousseff administration itself.

Participatory Democracy Back to the Fore: *Democracia Pluriparticipativa*

At roughly the same time in 2010 and 2011 that the steering committee was coming under increasing attack from the Ministry of Communications and ANATEL, there were moves by some committee members and individuals at the committee's secretariat to broaden citizen participation. For example, in 2010 the secretariat of the steering committee gained a staunch, long-time advocate of Internet freedom and participatory democracy when Carlos Cecconi was hired as the technical director – the number two position in the organizational structure under Professor Hartmut Glaser. Since 2007, Cecconi had been the director of the W3C.br, the Brazilian branch of the World Wide Web Consortium organization founded by the creator of the World Wide Web, Tim Berners-Lee, to harmonize global Internet networking standards. W3C's offices are in the same office suite as the steering committee and NIC.br, and thus Cecconi had already been working extremely closely with the secretariat and NIC.br prior to his appointment as the technical director of the steering committee. In his new capacity, he managed the day-to-day operations of the secretariat.

Cecconi comes from a lower middle class family from the urban periphery of São Paulo. As a young man in the late 1970s and early1980s, he became involved in the neo-Marxist liberation theology movement and became a leader in local *Comunidades Eclesiais de Base* (Christian Base Communities, or CBE), which are Catholic community groups that interpret the teachings of Jesus as a call to empower the poor to address inequality through political participation in this lifetime, rather than waiting for the promise of a better future in the afterlife. In the São Paulo region these progressive, left-wing Catholic groups were closely linked to union organizing and participatory democracy initiatives. Thus, Cecconi became a founding member of the PT, and when then-PT politician Luiza Erundina was elected mayor of the city in 1988, Cecconi took up a position in the administration. It was in this administrative capacity that he first became interested in software for bookkeeping. Then in the late 1990s, in another administrative job at a business association, he became familiar with FOSS, which he saw both as a cost-effective technical solution and also as the technological embodiment of democratic engagement. When Lula da Silva (PT) assumed the

presidency in 2003, Cecconi joined the administration and became Sergio Amadeu's second-in-command at the ITI, the government agency that was spearheading the attempted transition to FOSS. He left the agency shortly after Amadeu and eventually was offered a position at W3C.br by Hartmut Glaser. There, his job was to advocate open source platforms, but also Internet freedom more broadly. As such, when he moved to his new position at the secretariat activists felt like they had a true ally in one of the highest positions on staff at the offices of the Brazilian Internet Steering Committee.

Cecconi had a slightly different take on the ideal nature of the committee that departed slightly from the multi-stakeholder model espoused in committee documents and by most others including Getschko and Afonso. More than just multi-stakeholder model, Cecconi stated that he hoped Brazil's Internet governance model will develop into one that is *pluri-participativa* (pluri-participative). By this he meant:

> All sectors involved [in the Internet] need to be present in the decision-making process concerning the development of the Internet and its governance. But it is not sufficient to just be present. The process of participation needs to be fair (*equânime*)…This mathematics of power of Internet governance is still in the process of being constructed. You need to involve all the sectors, but more than this you need to guarantee that participation is fair in such a way that an organization that defends rights has the same decision-making power of a government.

For Cecconi it was important that different sectors of society are not only listened to when decisions are being made, but that they are actually able to influence decision-making. Indeed, activists have often felt that they are given space to speak, but that their opinions are not taken into account when policies are enacted. However, as Cecconi indicated, putting these lofty ideas of participation into practice was still being discussed. To this end, a new forum for in-person participation was created soon after Cecconi joined the secretariat, which further empowered Internet freedom activists.

The launching of the annual *Forúm da Internet no Brasil* in 2011 represented a more concrete effort to include citizen participation in steering committee policy formulation. These annual meetings organized by the Brazilian Internet Steering Committee and NIC.br are open to the public and include hundreds of participants including many committee members, representatives from non-profits and NGOs, academics, and citizens. The first event consisted of a general plenary and a number of panels and workshops dedicated to specific Internet-related topics such as privacy, net neutrality, freedom of expression, innovation, and entrepreneurship. Internet freedom activists began using these forums as spaces to organize and make demands.

In 2011 charismatic and indefatigable organizer Sergio Amadeu rejoined the steering committee after deciding to run for a position as a representative of the *terceiro setor*. He was joined on the committee as a representative of the *terceiro setor* by lawyer and consumer advocate, Veridiana Alimonti, from IDEC – a Brazilian consumer rights non-profit – who was also quickly becoming one of the central organizers of the movement to pass the MCI. At this point, the MCI was stuck in the Brazilian congress as lobbying by the telecom corporations opposed to it had essentially blocked it. Activists, led by Amadeu and Alimonti, used these meetings as opportunities to try to influence committee decisions. Likewise,

bringing activists from all over Brazil together created important networking opportunities and strengthened the activist front.

In 2012, activists at the second *Forúm da Internet no Brasil,* held in the colonial Northeastern city of Olinda, collaboratively drafted the *Carda de Olinda* – Letter from Olinda – that was addressed to policymakers in Brasília in an effort to push them to pass the MCI. The letter began this way:

> We, citizens, representatives of civil society, organizations, and Internet freedom activists present at the 2nd *Forúm da Internet no Brasil* in Olinda consider it imperative the immediate approval of the *Marco Civil da Internet* in Brazil in relation to its importance for the guarantee of liberty and the rights of citizenship, individuals, and Internet collectives.
>
> The Internet is under attack. In various countries corporations and retrograde segments of the government bureaucracy want to restrict the democratic possibilities that the Internet has brought, and they want to block the sharing of cultural goods and prevent the free creation of content, platform, and technologies.

The *Carta de Olinda* was disseminated online and a number of organizations and individuals endorsed it. It is important to note that the Brazilian Internet Steering Committee did not endorse this letter, as its representatives from the private sector would surely vehemently disapproved of its language. However, the fact that this was drafted at a conference created by the committee is significant in and of itself. It shows how these new avenues of participation created platforms for activists to organize. Surely, the *Carta de Olinda* would not be the deciding factor in a congressman's decision to support the MCI or not, but it was symbolic nonetheless. Indeed, Congressman Molon cited the letter as evidence of support for the MCI. Whether intended or not, the letter became associated with the committee because it was created at a conference the steering committee had organized and financed.

The third *Fórum da Internet no Brasil* in 2013, held at the beginning of September in the Amazonian city of Belém, once again attracted a large number of activists, many of whom had actually received funding from the steering committee to attend and who had been planning to do so for months. Representatives from the telecommunications sector however, perhaps in reaction to the hostility they felt at the forum in 2012, decided not to attend. Activists called this a *boicote* (boycott). Instead of attending the meeting, representatives of the telecoms stayed in Brasília where they testified before Congress and argued against the passage of the MCI with net neutrality provisions. At the time, passage of the MCI looked gloomy. Fátima Conti, a long-time FOSS militant, took to the plenary where she said that activists needed to start thinking about other tactics to defend Internet freedom because she felt that the bill would be passed in such an altered way that it would not be worth activist support. At the conference, Alimonti helped coordinate the drafting of another letter urging Congress to pass the bill. Portions of the letter are as follows:

> At the public hearing held by the Senate on September 3, 2013, as reported in the press, the representative of the telecommunications companies said the bill called the *Marco Civil da Internet*, hinders digital inclusion and privileges some users at the expense of many.

> We, civil society organizations, representatives of academia, and Internet service providers, gathered at the third *Fórum da Internet no Brasil* would like to clarify some points of this argument, to repudiate any distorted interpretations that disregard all the advances achieved by years of transparent and democratic debate on the *Marco Civil da Internet*…
>
> Finally, we emphasize that the National Congress is facing the polarization between private interests of a minority and the public interest in the scientific, technological and social development of the nation, as a decision contrary to net neutrality protection endangers the Internet as we know it and as we want in the future. We therefore ask that the honorable senators take into account these distortions, noting that broad social participation that created this bill and now pressing for its adoption is on the side of net neutrality and defense of the *Marco Civil da Internet* as a document of principles for the Brazilian Internet, having among its foundations universal access without discrimination to the Internet.

The distortions that the letter refers to are arguments by the telecommunications companies about net neutrality. Alimonti told me at the conference that she too was concerned about the future of the bill, but saw no other path forward other to continue fighting for the version of the bill activists wanted. Unbeknownst to everyone at the forum, a meeting just three weeks later would radically alter the political equation and the future of the Brazilian Internet Steering Committee.

Rousseff Embraces the Brazilian Internet Steering Committee

Throughout 2013, Carlos Cecconi had been working with some of his contacts in the Rousseff administration to try to set up a meeting with the entire Brazilian Internet Steering Committee in order to familiarize her with its work. Finally, in the wake of revelations about NSA surveillance when Internet policy became a priority for the administration, a meeting in Brasília was finally arranged. On September 16, 2013, the entire committee met with Rousseff, who was accompanied by Minister of Communications Paulo Bernardo and Congressman Molon, the congressional sponsor of the MCI. Rousseff had done her homework before the meeting. According to Afonso, she started the meeting by stating that she, and thus her administration, agreed with the principles of the *Decálogo*. She also embraced the multi-stakeholder model of the committee. Committee members like Afonso, Amadeu, Getschko, and Alimonti left the meeting upbeat. The extent to which Rousseff truly embraced the committee became apparent a week later.

On September 24, 2013, Rousseff gave the opening speech of the UN's 50th General Assembly in New York. Speaking directly before president Obama, Rousseff dedicated her speech to denouncing NSA surveillance. In her remarks she essentially repeated verbatim portions of the Brazilian Internet Steering Committee's *Decálogo*. She said:

We need to create multilateral mechanisms for the worldwide network that are capable of ensuring principles such as:

1. Freedom of expression, privacy of the individual, and respect for human right.
2. Open, multilateral, and democratic governance carried out with transparency by stimulating collective creativity and the participation of society, governments, and the private sector.
3. Universality that ensures the social and human development and the construction on inclusive and non-discriminatory societies.
4. Cultural diversity, without the imposition of beliefs, customs, and values.
5. Neutrality of the network guided by technical and ethical criteria, rendering it inadmissible to restrict for political, commercial, religious or any other purpose.

Indeed, these five points were lifted almost word-for-word from the *Decálogo* that Getschko and Afonso helped write. The principles of these Brazilian Internet pioneers and Internet freedom activists were now the official policy of the Rousseff administration, and this was being broadcast to the global community and beyond. Both men were elated, as were Internet freedom activists across Brazil. Demi Getschko wrote this note on the micro-blogging website Twitter: "Dilma practically reads the *Decálogo* of the Brazilian Internet Steering Committee at the opening of the UN General Assembly!"(2013). While it would still be months before the MCI passed the Brazilian Congress, at this moment it became clear that the chances of that happening had increased since Rousseff had now thrown her support behind the bill. It was also only a couple of weeks after Rousseff's speech that Molon modified the text of the *Marco Civil da Internet* to re-insert language about the Brazilian Internet Steering Committee, which pleased activists and was mentioned at the beginning of the chapter.

Conclusion: Innovating Internet Governance

When President Rousseff finally signed the MCI into law on April 23, 2014, at the NetMundial gathering in São Paulo, the Brazilian Internet Steering Committee gained more permanent legal standing because it was specifically mentioned in the law as one of the organizations that would regulate net neutrality along with ANATEL. Whereas previously its legitimacy was based on a presidential decree, now it was backed with the force of congressionally passed legislation. Additionally, the committee and its unique governance system were showcased by the Rousseff administration, who presented the steering committee as the embodiment of the more democratic form of Internet governance that Rousseff was now urging other countries to embrace. As Carlos Cecconi said to me, in the wake of the event the steering committee had become *prestigiadíssimo* – highly prestigious – on the world stage. Indeed, at the meeting other countries expressed interest in copying the Brazilian Internet governance model. The government of Italy even paid for Getschko to visit in order to consult on how to set up a comparable, multi-stakeholder national Internet governance system. The combined legal and symbolic power that the passage of the MCI had given to the steering committee was undeniable.

The project of creating a more democratic Internet governance institution is still a work in progress. The various terms used to describe the ideal organizational structure – multi-stakeholder, multi-sector, multi-participatory, and *pluri-participativa* – indicate the

continued tensions over who has power in this organizational setup. Even the current model's most ardent proponents recognize that the elections to select representatives are limited in the sense that only registered organizations can participate. Opening these elections up to more citizens and groups could be a way to broaden participation. Another proposal often mentioned by Amadeu and Alimonti would be to create online *consultas públicas* – public consultations – similar to the ones conducted to help construct the text of the MCI, to include more citizen participation in policymaking.[15] At the same time, efforts to broaden the number of individuals in the decision-making process also potentially challenge the power of the Internet pioneers like Getschko who continue to exert a great deal of. Indeed, Getschko holds a permanent position as the representative of *Notório Saber* because of his expertise, but this arrangement is hardly democratic. Thus, there is continuing tension about the extent to which participation should be broadened to new groups and individuals or whether the benevolent architects and caretakers of the Brazilian Internet should have an outsized role in its governance because of their history. Moreover, how much citizen participation can be expected when the topics are often technical and complex? At what point is participation beneficial, and when might it be problematic? These are questions that are still being addressed.

The success of Internet freedom activists in shaping the Brazilian Internet Steering Committee into a symbolic defender of their goals, particularly around the issue of net neutrality, is to a certain extent due to the fact that the telecommunications corporations exerted relatively little effort in this particular deliberative forum. However, now that the role of the steering committee has been codified in law through the MCI and President Rousseff has embraced the committee's role, it is quite likely that telecoms will expend more energy participating in the committee. Indeed, there is already evidence that this is the case. On November 18, 2014, the newly elected representative from the *terceiro setor*, lawyer and consumer rights advocate Flávia Lefèvre Guimarães, sent out an email with a request for Internet freedom activists to help create a document from the *terceiro setor* to submit to the office of the *Casa Civil* of the Brazilian Presidency. The administration wanted to hear positions of different sectors of the committee as to what the role of the committee should be not only in regulating net neutrality – something that it was not by law involved in – but also the future role of the committee more broadly. Lefèvre Guimarães's email had an urgent tone because she noted that *SindiTeleBrasil*, the telecommunications association, had already prepared a document that was going to be submitted shortly. Rather than stalling, the telecom lobby was now being proactive, which meant that activists needed to quickly catch up if they wanted their opinions to be considered alongside those of the telecoms.

Ultimately, I conclude that Internet freedom activists have negotiated neoliberal reforms that transformed the telecommunications sector in Brazil in such a way as to create an institution, the Brazilian Internet Steering Committee, that is not corporate-dominated and which serves as an institutional platform for activists to promote their vision of the Internet. Indeed, Alimonti summed up the importance of the committee to activists in an interview with me when she said, "In general when these types of spaces do not exist it is not rare for governments to only listen to corporations. So this is the principal contribution of the steering

[15] In 2015 the Brazilian Internet Steering Committee conducted its first an online *consulta pública* about how exceptions to net neutrality referenced in the *Marco Civil da Internet* should be regulated. At the time of writing the results of this online consultation were still not known.

committee – to transform this advisory channel into something more equal." For Alimonti, while the current multi-stakeholder structure of this committee is far from perfect, it has opened up new space for democratic participation. At present, central to the agenda of activists is to continue deepening these forms of citizen participation in the steering committee at a point in time when its role in Internet governance has become increasingly important. However, the case of the Brazilian Internet Steering Committee also raises concerns about who is actually allowed to participate in these processes and whether or not these institutional structures are actually impervious to corporate cooption. Thus, while the rhetoric and practices of participatory democracy have been thus far used as a tactic to defend Internet freedom, the long-term effectiveness of this strategy is still to be determined.

CHAPTER 6

NETMUNDIAL: EXPORTING THE BRAZILIAN MODEL OF INTERNET GOVERNANCE

On April 23 and 24, 2014, in São Paulo thousands of representatives from governments, Internet governance organizations, as well as other Internet luminaries gathered for NetMundial: The Global Multistakeholder Meeting on the Future of Internet Governance. This was one of the largest, most high profile international summits on Internet policy ever held. The Brazilian President Dilma Rousseff had called the meeting in the wake of disclosures about US government mass surveillance by the NSA using the Internet and the global telecommunications infrastructure, which had been exposed by former contractor Edward Snowden in June 2013. These revelations raised serious doubts about the US government's intentions regarding the Internet, especially considering that the US government still exercised outsized influence at Internet governance institutions like the Internet Corporation for Assigned Names and Numbers (ICANN).[16] In the wake of revelations about NSA mass surveillance ICANN's relationship with the US government, which originally founded ICANN and still maintained veto power over some of its decisions, was called into question. This continuing relationship was increasingly problematic now that other governments felt that the US government used the Internet as a tool for espionage. An international consensus emerged that governance decisions needed to be internationalized, but what this meant was not clear. Governments like Russia, China, and a number of Middle Eastern countries that had a history of restricting Internet access had been calling for Internet governance to be the purview of the ITU, a UN body in which all UN-member states are represented. Critics of this arrangement, including many Internet freedom activists worldwide, felt this arrangement would bolster the power of repressive regimes, and was thus undesirable (DeNardis 2013). On March 14, 2013, the Obama administration announced that it would relinquish its privileged role at ICANN. The NetMundial summit was, thus, meant to chart a new path for Internet governance – one that the Brazilian government hoped would potentially be more democratic and have more international input.

The summit was held in the plush Grand Hyatt Hotel in the Berrini commercial district of São Paulo, just down the street from the offices of the Brazilian Internet Steering Committee, which had been charged by the Brazilian government with co-organizing the logistics of the conference along with Brazilian government officials. Rousseff and her administration wanted to highlight the Brazilian Internet Steering Committee's multistakeholder model, which entailed participation by representatives from government, the private sector, academia, and non-profits/NGOs. The multistakeholder model was not entirely unique to Brazil, in fact even ICANN had implemented components of the multistakeholder model, but the Brazilians were proud of both how they had implemented it

[16] ICANN is the California-based non-profit organization that oversees the allotment of Internet protocol (IP) numbers and manages the Domain Name System (DNS) – two functions essential for the operation of the Internet. ICANN was created in 1998 because the Internet was growing quickly and the ad-hoc registration system that emerged out of ARPANET in the 1980s was no longer viable. Thus, the US government agreed to cede logistical oversight of these tasks to the non-profit ICANN, while at the same time retaining veto power.

and of the results that it had produced, which were discussed in the previous chapter. Thus, the summit was an opportunity for proponents of the Brazilian Internet Steering Committee, like Afonso and Getschko, to urge others to follow Brazil's lead in creating multistakeholder institutions that in theory would develop more socially equitable policy that they considered better for the development of the Internet.

On the first day of the conference Rousseff gave a speech to the gathered dignitaries in which she championed Brazil's Internet policy and governance achievements. She argued that other countries should follow Brazil's lead:

> Brazil believes that Internet governance should be multistakeholder, multilateral, democratic, and transparent in nature. It is our view that the multistakeholder model is the best way to exercise Internet governance. Very much in accordance with this view, our local governance system, which has been in operation for 20 years, has relied on actual participation of representatives from civil society, members of academia, the business community, and the government at large at the [Brazilian Internet Steering Committee] We truly want to make relations between governments and societies more democratic, as well as the relations among governments. We want more, not less, democracy… The [*Marco Civil da Internet*] clearly shows the feasibility and success of open, multistakeholder discussions as well as the innovative use of the Internet as part of ongoing discussions as a tool and an interactive discussion platform.

Immediately following her speech, Rousseff signed the *Marco Civil da Internet* into law. She did so in front of a large audience that included some of the men who helped create the Internet in the first place. This included Vint Cerf, who in the 1980s had helped develop the TCP/IP software protocol on which Internet networking is based and Tim Berners-Lee who created HTML and gave birth to the World Wide Web in the 1990s. Berners-Lee, who had been advocating for passage of the bill, hailed its signing as a "gift to the Web on its 25th birthday." He once again declared that an international equivalent of the law, a global Magna Carta of Internet rights, was needed in order to protect the Internet.

The fact that the Brazilian government was hosting this conference was evidence of its leading role in starting a debate about global Internet policy. Both the *Marco Civil da Internet* and the multi-stakeholder Brazilian Internet Steering Committee institutional structure were held up at the summit as examples of how Brazil had been a leader in democratizing Internet policy and governance. As Carlos Cecconi, the technical director at the Brazilian Internet Steering Committee and longtime FOSS militant later told me in an interview, "Brazil is not a big player in the creation of technology, but it became a big player in terms of formulating Internet governance policy." For him, these legal and institutional models were some of the biggest Brazilian contributions to discussions about the future of the Internet. More specifically, I argue, it was the result of years of dedicated work by a particular group of techno-political Brazilian Internet freedom activists who were able to command the attention of government policymakers.

Arena NetMundial: Activist Participation at Arms Length

At NetMundial, President Rousseff presented the Brazilian government as an unmitigated supporter of global democratic Internet governance. This support was evidenced

by its backing of the *Marco Civil da Internet* and the Brazilian Internet Steering Committee. Yet, as my research shows, this support was quite recent and highly contested. Indeed, the long political battles over the Internet freedom bill and the Internet advisory board went unmentioned. Uniformed onlookers from abroad might mistakenly have come away with the impression that Brazil was a paradise for new mechanisms for participatory democracy, when, in fact, they were highly challenged and internally divisive, even within the governing PT. Furthermore, while Rousseff was calling for increased citizen participation in shaping Internet governance at the summit, at the same time, many Brazilian Internet freedom activists found that they were prevented from actively participating in NetMundial and that some of their primary policy concerns had been ignored. Thus, the organization of the NetMundial summit demonstrated how the government's notion of participation was circumscribed in ways that preferenced corporate lobbies and marginalized more radical activist participation even while highlighting the Brazilian government's attempt to create a global Internet governance that was more inclusive and participatory.

Without a doubt, Internet freedom activists were universally elated that Brazil was hosting the global Internet governance conference, however, there was dismay over the relatively limited amount of participation in the main event that would be afforded to them by the organizers. This was because to participate in the conference individuals needed to be invited and space was limited given that there were hundreds of representatives from various countries attending. This meant that even though the summit was in Brazil, the number of Brazilians who could participate would be limited. Activists, however, did not let an event of this magnitude take place in their own back yard without making their voice heard. To this end, they organized a parallel event called Arena NetMundial that was held at the *Centro Cultural de São Paulo*, miles away from the NetMundial summit site. Marcelo Branco, the FOSS activist who helped start FISL in 2000, led this alternative forum, which was co-sponsored by the Brazilian Internet Steering Committee, the city government of São Paulo, and the Secretary-General's office of the Brazilian Presidency. All of its events were streamed live online and participation via the Internet was encouraged. Arena NetMundial was meant to serve as a gathering place for activists worldwide who headed to Brazil during the summit. It was meant to be a space for open dialogue where controversial issues could be actively debated. In her speech at NetMundial, Rousseff hailed Arena NetMundial as the gathering place for "organized civil society." This at once recognized the efforts of activists, while also relegating them to a separate, albeit associated, event.

Arena NetMundial demonstrates how even though the demands of Brazilian Internet freedom activists were extremely influential in shaping the context which led to NetMundial being held in Brazil, many activists were excluded from participating in the summit itself. It was the arguably more corporate-friendly, consensus-based multistakeholder model of the Brazilian Internet Steering Committee that was on display at the official summit, as opposed to the more radical, grassroots approach that some Internet freedom activists had been calling for. Those international and Brazilian activists who were able to participate at NetMundial complained that they were given little time to speak (30 seconds) and that traditional lobbies, primarily corporations, had easier access drafting the policy statements that would be included in a final summit agreement. Likewise, when activist concerns were discussed at the summit the powerful corporate lobby was able to water down or depoliticize them. For example, in the final non-binding summit agreement there was no condemnation of NSA mass surveillance, something that the Brazilian government had lobbied hard for. Also, in the

summit agreement there was no explicit mention of the term "net neutrality." While the technical language in the document did indicate support concepts central to net neutrality (e.g, no filtering of content on the Internet), the fact that the term itself was excluded indicates the lack of political will to engage in the debate. Activists had been working so hard to educate the public about the central importance of this technical rule, and now it had seemingly disappeared from the official agenda. Because of this, French Internet freedom activist Jérémie Zimmermann called the document "weak, toothless, and disappointing" (Napolitano 2014). Ultimately, the most important item in the document was a consensus that governance of ICANN should be under international, rather than US, control by September 2015.

So while in many ways NetMundial was a massive victory for Brazilian activists in that it exhibited renewed global attention to Internet policy and the rights of Internet users, it also revealed that activists would need to continue making demands and mobilizing in order to effect change. The very fact that Arena NetMundial existed at all, and that activists were marginalized from the official global summit, raised questions about what types of participatory democracy the Brazilian government would continue to advocate for and whether or not they would actually result in the social changes desired by activists. The Brazilian multistakeholder model of governance was on display, but it proved to be a letdown for many activists who contended that it did not represent radical, democratic change. In a blog post following the conference, Deborah Brown, an American Internet freedom activist, wrote, "By promoting 'equal footing' among stakeholders without putting in place mechanisms to better facilitate the inclusion of underrepresented and marginalized groups, as well as increased transparency and accountability, the same powers will continue to dominate" (Brown 2014). Nonetheless, even in spite of the limitations of NetMundial, it is impossible to deny the impact of Brazilian Internet freedom activists in reshaping international debate about Internet policy and governance.

Participatory Democracy: Reshaping the Internet through Citizen Participation

In the preceding chapters, I have examined how Brazilian Internet freedom activists have used the rhetoric and practices of participatory democracy in hopes of creating more socially equitable Internet policy. I have argued that this strategy was linked to the Brazilian redemocratization process beginning in the late 1970s when a number of progressive, left-wing social movements working against authoritarian and elite control of the state began employing notions of participatory democracy by incorporating the working class and previously marginalized groups in the decision-making process (Santos and Avritzer 2007). The broadened notion of citizen participation endorsed by these social movements was meant to challenge the liberal democratic system in which elites and corporations exercised outsized control. The work of Brazilian Internet freedom activists is thus one of the most recent policy areas in which notions of participatory democracy have been put into practice. In contrast, my research also highlights the limitations of this strategy to effect radical social change given the ways that, as Dagnino (2007) points out, the call to citizen participation can also serve the neoliberal project by giving it the veneer of popular approval. When participation is conceptualized as merely a way for people to voice their opinion with little regard given to actually redistributing power, it runs the risk of reinforcing the status quo and failing to substantively address issues of social inequality. In particular, I have explored the limits of citizen participation in post-dictatorship Brazil where the current liberal democratic system

continues to overwhelmingly favor the input of elites and corporations. Thus, I have characterized the unfinished political project of left-wing movements to radically redistribute power in Brazilian society in hopes of creating a form of democracy in which resources and political influence are more equitably distributed. In this way, I have documented varying notions of what the term democracy actually means and whose interests this political arrangement should serve.

Ultimately, my research builds on existing research regarding participatory democracy, but is innovative in the fact that it looks at how these theories are being applied to Internet governance. In the Introduction, I framed my research within a larger body of scholarship analyzing the emergence and application of theories of participatory democracy in Brazil. I showed how Brazilian activists were part of an emergent global Internet freedom movement, but contended that they were unique because not only were they calling for policies that would preserve an *Internet livre*, but they also championed new forms of citizen participation in the democratic process. I noted how Internet freedom activism in the US in the 1990s was largely cyber-libertarian in nature in that activists eschewed any state intervention, whereas, in contrast, more recent Brazilian activism has been focused on making demands on the state to uphold what they consider to be positive Internet regulation. I contend that in this sense, Brazilian Internet freedom activists have been pioneering, and that activists around the world are now taking a similar tack. I expanded on the three main policy areas that have been of concern to Internet freedom activists worldwide for the past five years: maintaining user privacy, preserving freedom of expression by combatting restrictive intellectual property policies, and defending net neutrality. For analytical purposes, I divided the Brazilian Internet freedom activists that are the object of my study into four broad categories: Free and Open Source Software (FOSS) Militants, Media Democratization Activists, Progressive Legal Scholars, Science and Technology Researchers. These categories, which I referred back to throughout the dissertation, shed light on the internal tensions within this activist network that rallied around the common cause of promoting an *Internet livre*, but which had varying notions regarding the role of the state and corporate actors in shaping Internet policy and about how the larger political economy should be structured.

Technological Geographies and Brazilian Counter-Hegemonic Visions of the Internet

The narrative I have presented illustrates Brazil's unique position as a place where the politics, meanings, and uses of new digital technologies have been envisioned in a way that differs from those in the Global North where these technologies were first developed. In Chapter 2, I detailed the emergence of the Internet in the US and its spread to Brazil in the 1980s and 1990s. I argued that the Internet as a technology is socially embedded, which means that it is produced by individuals within particular socio-political contexts and constantly in flux as new technologies and social uses are incorporated into it. I demonstrated how the global spread of the Internet in the 1990s was linked to neoliberal policies, but also how in Brazil the concomitant spread of free and open source software resulted in the software's incorporation as the technological platform of a larger anti-neoliberal political project among left-wing labor union organizers aligned with the Brazilian Worker's Party. This history exemplifies how Brazil has served as a base for developing counter-hegemonic technological visions and helps explains the emergence of the techno-political Internet freedom activism in Brazil.

In Chapter 3, I explained how notions about how increasing citizen participation in decision-making, which is central to theories of participatory democracy, were employed by activists in the creation of a pioneering Internet freedom bill called the *Marco Civil da Internet*. Drafting the bill's text via an online, collaborative website was an example of an open government (*governo aberto*) initiative, which activists contended would create policy that was not beholden to corporate interests, but was more responsive to popular demands and thus more socially equitable. However, I found that while this online method created a platform for a small number of people, including many Internet freedom activists, to voice their concerns, it did not directly result in change as government officials and legislators largely ignored the results. This showed how the Internet can give the impression that people's voices are being heard, but that these new digital networking technologies in no way guarantee a more equal distribution of power within society.

The Limits of Participation within a Neoliberal Political Economy

While Brazilian activists have innovative mechanisms of participatory democracy in hopes of redistributing power and resources more evenly within Brazilian society, these efforts have to date not fundamentally altered the Brazilian political economy. Likewise, participation has been coopted by proponents of neoliberalism to include corporate participation in the form of so-called corporate citizenship. Thus, even while neoliberal policies have not been enacted as completely in Brazil as they have been in other Latin American countries, corporate power still dominates this liberal democratic country. In Chapter 4, I demonstrated how Internet freedom activists resorted to more traditional activist tactics such as street mobilizations, petitions, and meetings with policymakers to push their Internet freedom agenda given that corporate lobbying in both the executive and legislative branch of the Brazilian government had blocked the passage of the *Marco Civil da Internet*. In this push activists employed the Internet as an organizing tool, which illustrates how technology can never substitute for the face-to-face encounters of old-fashioned organizing even while it can be a useful tool for mobilizing people and bringing them together. I then examine how two events – the leak of NSA documents by Edward Snowden and the following nationwide street protests in Brazil – altered the political environment in such a way as to refocus political attention on Internet policy and democratic governance. At this juncture, Brazilian Internet freedom activists were able to command the attention of policymakers and successfully argue for their positions. They continued to call for more citizen participation in decision-making because they continued to believe this would challenge the elite-controlled, neoliberal democratic system in Brazil that largely attended to corporate interests.

In Chapter 5, I noted how the debate over the *Marco Civil da Internet* became entwined with the institutional legitimacy of the Brazilian Internet Steering Committee, a national advisory panel formed in 1995 during the neoliberal restructuring of the telecommunications sector. The creation of this institution by the individuals who helped connect Brazil to the Internet was seen as a way to prevent corporate capture of Internet governance by the newly privatized telecommunications companies. More recently in 2003, Internet freedom activists led efforts to restructure the committee to increase democratic participation by creating elected positions from non-profits and NGOs on the committee and also by holding yearly forums that allow interested citizens to affect the committee's agenda. However, this multi-stakeholder model also gave power to corporate representatives who can

exert veto power given that the committee operates on consensus. Thus, while activists have used this new channel of institutional engagement to at least temporarily command the committee's agenda, ultimately there is no guarantee that this institutional model will necessarily result in more socially equitable policy in the future as corporations become more involved in committee deliberations. Thus, while President Rousseff has held up the committee as an example of a more democratic form of Internet governance at NetMundial, it is not clear that replicating this model in other countries will necessarily result in similar policy outcomes.

Ultimately my research shows that the call for more citizen participation in the decision-making process is one that is popular among Brazilian activists because it potentially opens up institutional spaces in which activists can exert more power to shape policy outcomes. In this way, it is part of a longer trajectory in Brazilian society to create a democratic system that is more representative of the Brazilian population. However, these calls to participation are potentially problematic given their vague nature, and the fact that they do not directly address persistent power inequities in society, and can therefore be easily incorporated into a neoliberal governance model. In this way, participatory democracy in itself is not a cure-all to addressing unequal power distribution in society. Likewise, the Internet as a technology, one that many have hailed as innately democratizing, will not by itself lead to a more just distribution of resources and influence. All technology is socially embedded, and thus is inserted within the broader relations of power and inequality. The work of Brazilian Internet freedom activists, thus, has been to marshal digital networking tools to activate broad-based political participation to affect change.

Re-Coding the Internet: The Impact of Brazilian Internet Freedom Activism on Global Internet Governance

In his influential book *Code and other Laws of Cyberspace*, legal scholar Lawrence Lessig argued that computer code regulates individual behavior on the Internet in much the same way that legal code intends to (2000). By this he means that the fundamental design choices incorporated into building software code ultimately determines what users are and are not capable of doing. In this way computer "code is law" because it governs the behavior of individuals and potential modes of conduct. For example, Digital Rights Management (DRM) technologies now embedded in hardware and software that limit copying and distribution of copyrighted material often end up impeding users from performing even legal operations. Multinational corporations that profit from intellectual property have developed these DRM technologies in order to deter digital piracy. In 1998, these corporations successfully lobbied for the passage of the US Digital Millennium Copyright Act (DMCA), which makes it illegal in the US to tamper with DRM. More recently, in 2013 they succeeded in having DRM protocols embedded into the latest version of the HTML protocol, HTML5, used to code webpages. This affects users worldwide whether or not they are in a jurisdiction with restrictive intellectual property laws. In this way these technologies effectively create a global policy that is developed and enacted by corporations with hardly any public debate. These constraints are the antithesis of the "hacker ethos" on which the Internet was originally developed, because these technologies limit the technological autonomy of individuals and groups. Lessig made this argument in order to point out how seemingly technical decisions about technology shape social relationships by governing how people can behave. He was

pointing to the importance of developing free and open software in order to preserve individual liberty.

In this dissertation I have argued that Brazilian activists are on the front lines of preserving Internet freedom worldwide. Yet, as Carlos Cecconi, the technical director at the Brazilian Internet Steering Committee and longtime FOSS militant, acknowledged in his interview with me, Brazil is a relatively small contributor in terms of the creation of technology – hardware and software. Instead, I argue that the type of coding the Brazilian activists are doing is not the computer coding that Lessig refers to in his book. Rather, they are developing the actual legal code by which the Internet is governed. Their unique contribution to the legal code is to incorporate principles of participatory democracy. Thus, not only are they developing this legal code, but they are also transforming the way the legal code is developed. This is evidenced both in the creation of the *Marco Civil da Internet* and in the ways that they have attempted to transform the Brazilian Internet Steering Committee to include more citizen participation. In this light, the NetMundial conference was so significant because it represented an attempt to introduce the Brazilian participatory code into an emergent global Internet policy code.

As I have demonstrated in this dissertation, the Internet, like all technology, is socially embedded. It is a constantly evolving and contested technological platform that both reflects and embodies social power structures. This means that the socio-political context in which it is being elaborated continues to shape its ongoing development. For example, in the wake of the Snowden leaks, the Brazilian government invested in telecommunication cables connecting Brazil to Europe in hopes of lessening dependence on US Internet infrastructure. In this way the geopolitical environment became reflected in the global Internet infrastructure. In a similar way, policies like net neutrality can also be expected to have concrete impacts on the Internet in the long run. This will be manifested in how people use digital technologies, who has access to them, and what content is available. In the future, the effects of net neutrality policies may become more apparent as some places like Brazil adopt net neutrality, while others do not. In this way the Internet may become even more geographically differentiated. In one sense then, the NetMundial summit was an attempt to forge a new global consensus on the Internet that its Brazilian organizers and Internet freedom activists hoped would be more in line with the vision being advocated by the Brazilian government. When the Internet first arrived in Brazil in the 1990s it became imbued with particular meanings and notions involving democracy and participation. Should others around the world embrace the current Brazilian vision of the Internet, it would represent a feedback loop of sorts in which the values of Brazilian Internet freedom activists became embedded within the global network itself. However, what that participation will look like and whether or not it will challenge existing power structures is yet to be seen.

Internet Governance in Beta

When meeting with activists at Arena NetMundial, Gilberto Carvalho, the Minister of the Secretary-General's office of the Brazilian Presidency and one of Presidents Lula and Rousseff's closest advisors said, "If it was not for Snowden, we certainly would not be here." By this he meant that the revelations about NSA mass surveillance provoked a global debate about Internet policy and governance that had resulted in the NetMundial conference. While the impact of Edward Snowden's actions is undeniable, I think that Carvalho's statement underplayed the years of work done by Brazilian Internet freedom activists that created a

political environment in Brazil in which Internet policy had become a central concern of the government. As my research demonstrates, the work of activists in developing the *Marco Civil da Internet* and reforming the Brazilian Internet Steering Committee – the two initiatives the Brazilian government was showing off – long pre-date the June 2013 leaks. Without the decades of work that Brazilian activists had been doing, Rousseff and her administration would have had nothing to present to the world. In fact, before the NSA leaks parts of her administration had almost succeeded in scuttling the *Marco Civil da Internet* and delegitimizing the Brazilian Internet Steering Committee. Now, however, Brazilian activist critiques of corporate control of the Internet and concerns about government surveillance were now two of the biggest issues being discussed at NetMundial. Thus, Snowden's actions were important for creating an altered political environment that allowed activists to finally leverage support for policies they had been championing for years.

Computer programmers often refer to software that is still in the trial stages as being in "beta." In many ways, the push to radically democratize Internet policy and governance that is the legacy of the Brazilian redemocratization movement is still in the beta stage. It remains unclear how ordinary citizens can participate in determining highly technical rules about how computer networks operate. The fact that activists needed to spend so much time informing the public about what net neutrality means and its implications for society is evidence of this. Perhaps one of the most important components of this participatory ethos, and what distinguishes it from the way that liberal democracy has developed, is that it creates room for debate that is not dominated by corporate entities. It is difficult to imagine that laws such as the DMCA that restrict user conduct could have been produced using a participatory method that incorporated broader sectors of society. Likewise, it is doubtful that NSA mass surveillance policies would have been approved had they depended on citizen input. The fact that these threats to Internet freedom emanated from the US, a liberal democracy, suggests that new democratic models need to be developed if the Internet is to remain a democratic platform itself. It is the innovative spirit and desire to "democratize democracy" that makes Brazilian activists unique.

In a global environment where corporations and government security agencies have so much power, and often work hand-in-hand, it is difficult to know whether this beta Brazilian code that promotes participatory democracy will have long-term, reverberating effects. Yet, the story of Brazilian Internet freedom activists I have presented here shows how they have, in at least some instances, successfully negotiated against the interests that threaten an *Internet livre*. This should serve as inspiration to Internet freedom activists worldwide that their vision of an open, democratic Internet still appears to be within reach.

REFERENCES

Abers, Rebecca. 1996. "From Ideas to Practice: The Partido Dos Trabalhadores and Participatory Governance in Brazil." *Latin American Perspectives* 23(4):35–53.

Adachi, Tomi. 2011. "Comitê gestor da internet no Brasil (CGI.br): uma evolução do sistema de informação nacional moldada socialmente." text, Universidade de São Paulo.

Alfredo, Saad Filho. 2010. "Neoliberalism, Democracy, and Development Policy in Brazil." *Development and Society* 39(1):1–28.

Amadeu da Silveira, Sergio. 2000. *Poder no ciberespaço: o Estado-nação, a regulamentação e o controle da Internet*.

Amadeu da Silveira, Sergio. 2008. "Manifesto Em Defesa Da Liberdade Do Progresso Do Conhecimento Na Internet Brasileira." *Blog do Sergio Amadeu*. Retrieved April 24, 2014 (http://samadeu.blogspot.com/2008/07/manifesto-em-defesa-da-liberdade-e-do.html).

Amadeu da Silveira, Sergio. 2010. "O Projeto de Marco Civil da Internet e a Crítica ao Mecanismo de Bloqueio Instântaneo de Conteúdo." *Software Livre Brasil*. Retrieved April 4, 2015 (http://softwarelivre.org/samadeu/blog).

Appadurai, Arjun. 1996. *Modernity at Large: Cultural Dimensions of Globalization*. Minneapolis; London: University of Minnesota Press.

Aquina, Miriam and Georgia Jordan. 2011. "Resolução do CGI sobre Norma 4 sai com um mês de atraso, devido à polêmica sobre o provedor." *TeleSíntese*, October 14. Retrieved November 15, 2014 (http://www.nic.br/imprensa/clipping/2011/midia942.htm).

Aretxaga, Begoña. 2000. "A Fictional Reality: Paramilitary Death Squads and the Construction of State Terror in Spain." Pp. 46–69 in *Death Squad: Anthropology of State Terror*, edited by J. A. Sluka. Philadelphia: University of Pennsylvania.

Avritzer, Leonardo. 2007. "Modes of Democratic Deliberation: Participatory Budgeting in Brazil." Pp. 378–404 in *Democratizing Democracy: Beyond the Liberal Democratic Canon*, edited by B. de S. Santos. London; New York: Verso.

Avritzer, Leonardo. 2009. *Participatory Institutions in Democratic Brazil*. Washington, DC: Woodrow Wilson Center Press.

Baiocchi, Gianpaolo. 2005. *Militants and Citizens: The Politics of Participatory Democracy in Porto Alegre*. Stanford University Press.

Baran, Paul. 1964. "On Distributed Communications Networks." *IEEE Transactions on Communication*.

Barlow, John Perry. 1996. "A Declaration of the Independence of Cyberspace." Retrieved April 11, 2014 (https://projects.eff.org/~barlow/Declaration-Final.html).

Benkler, Yochai. 2006. *The Wealth of Networks: How Social Production Transforms Markets and Freedom*. New Haven: Yale University Press.

Bernardo, Paulo. 2011. "Marco Civil: Para Minicom, Internet é grande ambiente de negócios." Retrieved November 14, 2014 (https://www.youtube.com/watch?v=UoryFn8avFg#t=190).

Branco, Marcelo D'Elia. 2014. "Governo Aberto Não é Governo Eletrônico. TSE Congela a Participação Social!?" *Blog Marcelo Branco*. Retrieved July 10, 2014 (http://softwarelivre.org/branco/blog/governo-aberto-nao-e-governo-eletronico.-tse-congela-a-participacao-social).

Brown, Deborah. 2014. “NetMundial: A Lot to Love and a Lot to Hate.” *Access*. Retrieved June 15, 2015 (https://www.accessnow.org/blog/2014/04/25/netmundial-a-lot-to-love-and-a-lot-to-hate).
Cadina, Pedro. 2004. “Linus, We Love You: A Report from the 5th International Free Software Forum.” *Linux Journal*, June 18. Retrieved March 31, 2015 (http://www.linuxjournal.com/article/7635).
Caribé, João Carlos. 2006. “A Morte Da Internet No Brasil.” *Xô Censura !* Retrieved April 2, 2015 (https://xocensura.wordpress.com/2006/11/07/a-morte-da-internet-no-brasil/).
Castells, Manuel. 2000. *The Rise of the Network Society*. Walden, MA: Blackwell Publishers.
Castells, Manuel. 2003. *The Internet Galaxy: Reflections on the Internet, Business, and Society*. Oxford: Oxford University Press.
Ceruzzi, Paul E. 2003. *A History of Modern Computing*. 2nd ed. Cambridge, MA: MIT Press.
CESPI. 2012. “Sergio Amadeu: Presidente da Reconstrução.” *Centro Ecumênico Superior Piauiense (CESPI) Online*. Retrieved April 30, 2015 (http://cespichabad.com.br/?pg=entrevista&id=108).
Coleman, E. Gabriella and Alex Golub. 2008. “Hacker Practice.” *Anthropological Theory* 8(3):255 –277.
Coleman, Gabriella. 2010. “Ethnographic Approaches to Digital Media.” *Annual Review of Anthropology* 39(1):487–505.
Coleman, Gabriella. 2013. *Coding Freedom: The Ethics and Aesthetics of Hacking*. Princeton: Princeton University Press.
Comitê Gestor da Internet no Brasil. 2009. “Principles for the Governance and Use of the Internet, Resolução CGI.br/RES/2009/003/P.” Retrieved October 27, 2014 (http://cgi.br/en_us/resolucoes/documento/2009/003).
Comitê Gestor da Internet no Brasil. 2011. “Resolução CGI.br/RES/2011/004/P.” Retrieved October 28, 2014 (http://www.cgi.br/resolucoes/documento/2011/004).
Costa, Eliane. 2011. *Jangada Digital*. Rio de Janeiro: Azougue Editorial.
Dagnino, Evelina. 2007. “Citizenship: A Perverse Confluence.” *Development in Practice* 17(4-5):549–56.
DeNardis, Laura. 2013. “Multi-Stakeholderism: The Internet Governance Challenge to Democracy.” *Harvard International Review*. Retrieved June 17, 2015 (http://hir.harvard.edu/archives/10351).
Evangelista, Rafael de Almeida. 2010. “Traidores do Movimento: Política, Cultura, Ideologia e Trabalho no Software Livre.” Universidade Estadual de Campinas, Campinas, Brazil.
Folha de São Paulo. 2004. “Comitê Gestor da Internet será instalado nesta sexta em São Paulo.” *Folha de São Paulo*, January 23. Retrieved (http://www1.folha.uol.com.br/folha/informatica/ult124u15017.shtml).
Galloway, Alexander R. 2004. *Protocol: How Control Exists after Decentralization*. Cambridge, Mass.: MIT Press.
Getschko, Demi. 2013. “Dilma Praticamente Lê o Decálogo Do CGI Na Abertura Da ONU!” Retrieved December 13, 2013 (https://twitter.com/Getschko/status/382503370130329601).
Goldfrank, Benjamin. 2003. “Making Participation Work in Porto Alegre.” Pp. 27–52 in *Radicals in Power: The Workers’ Party and Experiments in Urban Democracy in Brazil*, edited by G. Baiocchi. Zed Books.

Goldsmith, Jack L. and Tim Wu. 2008. *Who Controls the Internet?: Illusions of a Borderless World*. New York: Oxford University Press.
Greenwald, Glenn. 2014. *No Place to Hide: Edward Snowden, the NSA, and the U.S. Surveillance State*. Metropolitan Books.
Grupo Marco Civil Já. 2013. "Manifesto Marco Civil Já." Retrieved January 19, 2015 (http://marcocivil.org.br/manifesto-mc/manifesto-mc/).
Hagopian, Frances. 2007. *Traditional Politics and Regime Change in Brazil*. Reissue edition. Cambridge; New York: Cambridge University Press.
Hale, Charles R. 2004. "Rethinking Indigenous Politics in the Era of the 'Indio Permitido'." *NACLA Report of the Americas* (Sept. Oct.):16–21.
Hale, Charles R. 2005. "Neoliberal Multiculturalism." *PoLAR: Political and Legal Anthropology Review* 28(1):10–19.
Harvey, David. 2005. *A Brief History of Neoliberalism*. 1st, First Edition. Oxford University Press.
Harvey, David. 2012. *Rebel Cities: From the Right to the City to the Urban Revolution*. 1st ed. Verso.
Hess, David J. 2005. "Technology- and Product-Oriented Movements: Approximating Social Movement Studies and Science and Technology Studies." *Science, Technology & Human Values* 30(4):515 –535.
Hindman, Matthew Scott. 2009. *The Myth of Digital Democracy*. Princeton: Princeton University Press.
Holston, James. 2009. *Insurgent Citizenship: Disjunctions of Democracy and Modernity in Brazil*. Princeton: Princeton University Press.
Holston, James and Teresa Caldeira. 1998. "Democracy, Law, and Violence: Disjunctions of Brazilian Citizenship." Pp. 263–96 in *Fault Lines of Democracy in Post-Transition Latin America*, edited by F. Agüero and J. Stark. North-South Cent.
Hunter, Wendy. 2010. *The Transformation of the Workers' Party in Brazil, 1989-2009*. New York: Cambridge University Press.
Johnson, Douglas H. 1982. "Evans-Pritchard, the Nuer, and the Sudan Political Service." *African Affairs* 81(323):231–46.
Junge, Benjamin. 2012. "NGOs as Shadow Pseudopublics: Grassroots Community Leaders' Perceptions of Change and Continuity in Porto Alegre, Brazil." *American Ethnologist* 39(2):407–24.
Juris, Jeffrey. 2005. "The New Digital Media and Activist Networking Within Anti-Corporate Globalization Movements." *Annals of the American Academy of Political and Social Science* 597:189–208.
Juris, Jeffrey, Giuseppe Caruso, and Lorenzo Mosca. 2008. "Freeing Software and Opening Space: Social Forums and the Cultural Politics of Technology." *Societies Without Borders* (3):96–117.
Keck, Margaret E. 1995. *The Worker's Party and Democratization in Brazil*. Reissue edition. Yale University Press.
Keck, Margaret. E. 1986. "Democratization and Dissension: The Formation of the Workers' Party." *Politics & Society* 15(1):67–95.
Kelty, Christopher M. 2008. *Two Bits: The Cultural Significance of Free Software*. Durham: Duke University Press.

Lemos, Ronaldo. 2007. “Internet brasileira precisa de marco regulatório civil.” May 22. Retrieved April 16, 2014 (http://tecnologia.uol.com.br/ultnot/2007/05/22/ult4213u98.jhtm).
Lessig, Lawrence. 2000. *Code: And Other Laws of Cyberspace*. New York, NY: Basic Books.
Lessig, Lawrence. 2004. *Free Culture: How Big Media Uses Technology and the Law to Lock down Culture*. New York: Penguin Press.
Levy, Steven. 1994. *Hackers: Heroes of the Computer Revolution*. New York, N.Y.: Dell Pub.
MacKenzie, Donald A. and Judy Wajcman. 1999. *The Social Shaping of Technology*. Buckingham: Open University Press.
MacKinnon, Rebecca. 2013. *Consent of the Networked: The World-wide Struggle for Internet Freedom*.
Marco Civil da Internet, Evento de Abertura. 2009. Rio de Janeiro: Fundação Getúlio Vargas. Retrieved April 5, 2015 (http://direitorio.fgv.br/node/832).
Marco Civil da Internet, Lei n^{o} 12.965. 2014. Retrieved March 27, 2015 (http://participacao.mj.gov.br/marcocivil/lei-no-12-965-de-23-abril-de-2014/).
McChesney, Robert W. 2013. *Digital Disconnect: How Capitalism Is Turning the Internet Against Democracy*. New York: The New Press.
Ministério de Comunicações. 1995. “Uso de Meios Da Rede Públic de Telecomunicações Para Acesso à Internet, Norma 004/95.” Retrieved (http://www.anatel.gov.br/hotsites/Direito_Telecomunicacoes/TextoIntegral/ANE/prt/minicom_19950531_148.pdf).
Ministério de Comunicações and Ministério de Ciência e Tecnologia. 1995. “Portaria Interministerial N° 147.” Retrieved October 30, 2014 (http://www.cgi.br/portarias/numero/147).
Morozov, Evgeny. 2011. *The Net Delusion: The Dark Side of Internet Freedom*. New York: PublicAffairs.
Murillo, Luis Felipe R. 2012. “Inventions of Free and Open Source Software in Brazil.” UCLA, Los Angeles.
Napolitano, Antonella. 2014. “After NETmundial, Multistakeholder Statement Criticized As.” *TechPresident*. Retrieved June 15, 2015 (http://techpresident.com/news/wegov/24969/netmundial-multistakeholder-statement-weak-toothless-sterile).
Nylen, William R. 2003. *Participatory Democracy Versus Elitist Democracy: Lessons from Brazil*. 1st ed. New York: Palgrave Macmillan.
Paley, Julia. 2002. “Toward an Anthropology of Democracy.” *Annual Review of Anthropology* 31(1):469–96.
Pariser, Eli. 2012. *The Filter Bubble: How the New Personalized Web Is Changing What We Read and How We Think*. Reprint edition. New York, N.Y.: Penguin Books.
Radcliffe-Brown, A. R. 1950. “Preface.” Pp. xi–xxiii in *African Political System*, edited by M. Fortes and E. E. Evans-Pritchard. Oxford: Oxford University Press.
Rahnema, Majid. 2010. “Participation.” Pp. 127–44 in *The Development Dictionary: A guide to Knowledge as Power*, edited by W. Sachs. London: Zed Books.
Raymond, Eric. 1998. “Goodbye, ‘Free Software’; Hello, ‘Open Source’.” Retrieved October 20, 2014 (http://www.catb.org/~esr/open-source.html).

Rená da Silva Santarém, Paulo. 2011. "O Direito Achado na Rede: A Emergência do Acesso à Internet Como Direito Fundamental no Brasil." Universidade de Brasília, Brasília.
Salus, Peter H. 1995. *Casting the Net: From ARPANET to Internet and Beyond*. Reading, Mass.: Addison-Wesley Pub. Co.
Sampaio, Rafael Cardoso, Rachel Callai Bragatto, and Maria Alejandra Nicolás. 2013. "Inovadora e Democrática. Mas e aí? Uma análisa da primeira fase da consulta 'online' sobre of Marco Civil da Internet."P. 31 in. Curtiba, Brazil.
Santos, Boaventura de Sousa. 1998. "Participatory Budgeting in Porto Alegre: Toward a Redistributive Democracy." *Politics & Society* 26(4):461–510.
Santos, Boaventura de Sousa. 2008. "The World Social Forum and the Global Left." *Politics & Society* 36(2):247–70.
Santos, Boaventura De Sousa and Leonardo Avritzer. 2007. "Introduction: Opening Up the Canon of Democracy." Pp. xxxiv–lxxiv in *Democratizing Democracy: Beyond the Liberal Democratic Canon*, edited by B. de S. Santos. London; New York: Verso.
Sassen, Saskia. 2002. "Towards a Sociology of Information Technology." *Current Sociology* 50(3):365–88.
Sávio, Marcelo. 2006. "A Trajetória da Internet no Brasil: Do Surgimento das Redes de Computadores à Instituição dos Mecanismos de Governança." Universidade Federal do Rio de Janeiro, Rio de Janeiro.
Schoonmaker, Sara. 2002. *High-Tech Trade Wars: U.S.-Brazilian Conflicts in the Global Economy*. 1st ed. University of Pittsburgh Press.
Sen, Jai and Peter Waterman. 2007. *World Social Forum: Challenging Empires*. 2nd ed. Montréal: Black Rose Books.
Shaw, Aaron. 2011. "Insurgent Expertise: The Politics of Free/Livre and Open Source Software in Brazil." *Journal of Information Technology & Politics* 8(3):253–72.
Snowden, Edward. 2013. "An Open Letter to the People of Brazil." Retrieved April 22, 2015 (http://www1.folha.uol.com.br/internacional/en/world/2013/12/1386296-an-open-letter-to-the-people-of-brazil.shtml).
Solagna, Fabricio. 2015. "A Formulação da Agenda e o Ativismo em Torno do Marco Civil da Internet." Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil.
Souza, Rebeca Hennemann Vergara de, Fabrício Solagna, and Ondina Fachel Leal. 2014. "As Políticas Globais de Governança e Regulamentação Da Privacidade Na Internet." *Horizontes Antropológicos* 20(41):141–72.
Stallman, Richard M. 2014. "Why Open Source Misses the Point of Free Software." Retrieved March 18, 2015 (https://www.gnu.org/philosophy/open-source-misses-the-point.html).
Teza, Mario. 2003. "Mario Teza fala da sua entrada no Comitê Gestor." Retrieved November 7, 2014 (http://www.softwarelivre.gov.br/noticias/entrevistateza).
Teza, Mario. 2007. "Cicarelli, Youtube e a Censura na Internet." *Cicarelli, Youtube e a Censura na Internet*. Retrieved November 12, 2014 (http://www.cgi.br/publicacao/cicarelli-youtube-e-a-censura-na-internet/53).
Winner, Langdon. 1980. "Do Artifacts Have Politics?" *Daedalus* 109(1):121–36.
World Wide Web Foundation. 2014. "Marco Civil: Statement of Support from Sir Tim Berners-Lee." Retrieved March 27, 2015 (http://webfoundation.org/2014/03/marco-civil-statement-of-support-from-sir-tim-berners-lee/).