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Critically Imagining Internet Governance: A Content Analysis of the *Marco Civil da Internet* **Public Consultation**

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João Carlos Magalhães

ABSTRACT

The revelations made by NSA (National Security Agency) ex-contractor Edward Snowden in 2013 opened a window of opportunity to discuss the reform of Internet governance. In general terms, this dissertation aims to investigate to what extent Internet governance can be structurally changed. However, it does it through a specific path: examining the limits of Internet governance emergence, or how it can be imagined. The concepts of social imaginary and power are combined to create a theoretical framework able to efficiently assess the public consultation designed to underpin what was presented as one of the responses to the NSA crisis, the Brazilian *Marco Civil da Internet* (Civil Rights Framework for the Internet), celebrated as a pioneering 'Internet Constitution'. Through a QCA (Qualitative Content Analysis), this dissertation analyzes 300 of the contributions made to that process. The results suggest, first, that an imaginary critical to the prevailing imaginaries of Internet governance is not simply a theoretical possibility, but was a reality during the Marco Civil consultation; and, second, the manner that power relations in Internet governance processes might be paradoxically imagined points to the difficulty of tackling the matter of inequalities within this debate.

INTRODUCTION

In September 2013, Dilma Rousseff, the Brazilian president, took the floor of the United Nations General Assembly in New York with a fierce critique of how the Internet is governed: 'We face...a situation of grave violation of human rights and of civil liberties, of invasion and capture of confidential information...of disrespect to national sovereignty' (Rousseff, 2013: 2). The 'situation' in question had been revealed by the documents leaked by Edward Snowden, the former NSA (National Security Agency) contractor. They demonstrated how American and British governments had been, with the help of leading tech companies, gathering massive amounts of data about Internet users – among them a number of powerful ones, such as Rousseff and German chancellor Angela Merkel (Greenwald, 2014). The Brazilian president's speech galvanized the momentum created by the scandal, and some kind of change in Internet governance arrangements seemed then unavoidable (Mueller, 2014).

Indeed, the crisis prompted at least three significant moves: the long-expected end of the USA stewardship over ICANN (Internet Corporation for Assigned Names and Numbers), the not-for-profit American company that runs the global domain name system, was announced in March 2014 (NTIA, 2014; Mueller and Wagner, 2014; Zittrain, 2014); a symbolically important but ultimately non-binding document protecting human rights and cultural diversity was produced during the NetMundial meeting, held in Brazil after the scandal (NetMundial, 2014); and, in a globally praised initiative, Ms. Rousseff signed, calculatedly during the same event, the Brazilian civil rights framework for the Internet, or Marco Civil da Internet (Marco Civil hereafter), a law that has been considered a pioneering 'Internet constitution' (Boadle, 2014; Abramovay, 2014).

Among those three cases, the Marco Civil presents an interesting opportunity to investigate a question that emerged more than a decade ago, during the WSIS (World Summit on the Information Society; more details below), and was resurrected by the NSA crisis: should Internet governance be structurally changed? Differently from the other two top-down responses to the crisis, the Brazilian initiative got started from an online public consultation which, although designed by policymakers and technocrats, received contributions from a much more variegated group of actors (Schulz, 2014). It is this process that is the focus of this dissertation. As I argue in the second chapter, it resulted in a myriad of narratives on the Internet governance that, regardless of their influence in the final shape of the Brazilian law, allowed for the investigation of that broad question from a heterodox and specific concept – the social imaginary.

As an analytical tool, the social imaginary may offer an understanding of the limits that determine the very possibility of the emergence of social objects and dynamics (Thompson, 1982; Gaonkar, 2002; Laclau, 1990). If what cannot be thought cannot be enacted, the problem above may be rewritten as 'How can Internet governance be imagined?'. If the potential answers to this question are, at the same time, significant and different from the prevailing ones, then structural changes are, at least in determined realities, possible – albeit, of course, not certain.

However, what are those prevailing imaginaries, and how can they be alternatively conceptualized? These parameters will be established in the initial chapter of this dissertation, in which a brief literature review of Internet governance delineates the main contentious points of the field, the elements that underpin its horizons. Then, a conceptual framework will be devised, combining Mansell's (2012) Internet Age social imaginaries with an adapted version of Luke's (1974/2005) take on 'power over'. The result is what I shall call 'power-informed Internet governance imaginaries'. This theoretical scheme will serve as the basis of this dissertation's empirical work: a QCA (qualitative content analysis) of 300 contributions made to the Marco Civil during the online consultation. The methodology of this endeavour will be detailed in the second chapter.

The results of this case study indicate that a critical horizon is more than a theoretical supposition: it is a reality – although hybridized with other imaginaries and complicated by a paradoxical way of imagining power.

First, I shall begin by providing the framework from which these conclusions will emerge.

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

Although a young field of study, Internet governance has had, much before the NSA scandal, a tumultuous existence, evolving into 'a highly contested area of policy and practice' (Ziewitz and Brown, 2011: 1; DeNardis, 2013). This chapter aims, first, to examine the literature on this topic, with the objective not to produce an exhaustive review, but to outline its main areas of contention. These areas will be considered key elements to think of how Internet governance can be imagined and will thus guide the construction of the conceptual framework.

Three paradigms

Embedded in the very early technical decisions that founded the Internet (Braman, 2011), Internet governance only became an explicit theoretical discussion from the 1990s on (Ziewitz and Brown, 2011). It is widely agreed that, at least until the mid 2000s, two paradigms dominated the debate: libertarian and realist (Mueller, 2010; Brown and Marsden, 2013; Murray, 2007, 2011; Tambini et al, 2008; Bygrave, 2009). The market-led opening of the Internet in the USA during the 1990s brought to the surface the common conviction among Web¹ pioneers that the technology would entail libertarian practices (Naughton, 2000; Abbate, 1999). Writing after the fall of the Berlin Wall, under a neoliberal and deregulatory spell (Curran, 2012), they argued that an open, collaborative, neutral and borderless logical structure would entail self-governed forms of community and information sharing and production (Rheingold, 2000), rendering nation states anachronic (Barlow, 1996). Instead of law-abiding citizens and jurisdictions, there would be digitalized individuals (Negroponte, 1995) freely choosing what rules to follow among the possibilities offered by an optimal e-market (Johnson and Post, 1996).

Nevertheless, the expansion and commercialization of the Web led scholars to reconceptualize Internet governance - which was seen not simply as a radical form of selfregulation resulting from an untamable neutral technology, but as the plastic management of a socially controllable system. Some of these 'realists' proposed that revamped legal tools could enable states to regain their central role, often in undemocratic ways (Goldsmith, 1998; Reed, 2004; Goldsmith and Wu, 2006; Deibert et al, 2008). Others, following the notion that artifacts have politics (Winner, 1986), claimed that the social shaping of the Internet's digital and physical architecture fundamentally altered governance (Lessig, 1999, 2006; Reidenberg, 1998; Benkler, 2000). From a pessimistic view, computer code was seen as a privately owned dangerous tool of ex ante control that in reality threatened the promise of a new democratic age (Lessig, 1999, 2006). Others understood this possibility as only one part of the Internet's 'generativity', a defining ambivalence that, on its positive and revolutionary side, empowered fragmented and fluid groups of technophiles to govern cyberspace through a common (open, public and collaborative) Web (Zittrain, 2006, 2008). Interlocked with this new order was the alleged rise of the social production of information (costless, decentralized, copy leftbased), the demise of the industrial production of information (costly, concentrated, copyright-based) and the conflicts created by this movement (Benkler, 2006).

Although apparently opposed, libertarians and realists shared a more or a less sophisticated form of techno-determinism, overstating the utopian/dystopian effects of technology on human agency and social structures (Mosco, 2004; Mayer-Schönberger, 2008; Murray, 2007), and understating the idealism and simplifications associated with it (Brown and Marsden, 2013). In sum, they were not sufficiently concerned with the political, economic and cultural complexity caused by a global and pervasive Internet.

¹ 'Web', 'Internet 'and 'network' are used interchangeably in this dissertation.

The tensions resulting from the globalization of the network 'hijacked' the agenda of the WSIS (Word Summit on Information Society; more details in the next chapter), whose various outcomes included a working definition of Internet governance (WGIG, 2005) that set the tone for what I shall call the eco-systemic paradigm – arguably the prevalent view today.

According to it, technology, markets, states, communities and global organizations such as ICANN, cannot, as discrete analytical categories, realistically explain Internet governance. It is necessary to see it as the result of a highly complex ecosystem of stakeholders with defined roles that stresses and changes previous institutions and practices, carrying with it 'an inherent tension between forces striving for interoperability and openness and forces striving for proprietary approaches and information enclosure' (DeNardis, 2013: 670). This 'emergent" governance is the outcome of a plethora of interactions involving billions of users that are steered by decisions from key actors and from governments, private companies, civil society and new organizations (Mueller, 2010: 9-10; DeNardis, 2014: 23; van Eeten and Mueller, 2012: 730; Mueller et al, 2007).

Their typical institutional habitat, nationally or internationally, is portrayed as multi-stakeholderism (Malcolm, 2008), something that embodies the promise of an enhanced political participation, threatens nation state sovereignty and entails fears of novel forms of tokenism (Cammaerts and Carpentier, 2005; Cammaerts, 2011). Undergirding this system are technologies whose designs, due to the challenges imposed to traditional forms of government, have been transformed into central expressions of power (DeNardis, 2012) and tools to gather and analyze 'dynamically collected, individual-level data about what people are, do and say' (Couldry and Powell, 2014: 1).

This paradigm lends two elements to the conceptual framework below. First, the multidimensional notion of governance, according to which, in an already converged landscape (Hargreaves, 2011; Latzer, 2009; Jenkins, 2004, 2006), media can only be optimally governed once 'governance' is understood as 'the entirety of forms of rules' produced by a highly diverse group of actors, thus broader than policies or regulation (Puppis, 2010:138; McQuail, 2007). Second, and in line with this notion, DeNardis' (2013) all-encompassing taxonomies of the field will provide the five pillars of my empirical investigation (see the bottom of the Figure 1).

Yet Eco systemic descriptive sophistication does not allow scholars to completely make sense of all those iridescent changes. Before an unseen level of complexity, they arguably end up

with general directions, but no precise map of what exactly is old and new in this state of things (Feenberg, 2010; Marvin, 1988), arguably producing only a 'thin account' of the social (Couldry, 2012: 167).

Contentious issues and the imaginary as an alternative

This review indicates that Internet governance studies have been explicitly revolving around two interconnected contentious issues:

1) How the Internet relates to previous and new forms of governing (markets, technology, nation-states, new global organizations, networks);

2) How the Internet relates to previous and new forms of information management (lowering costs of production, reproduction and storage of information, but challenging older economic arrangements about this management).

Briefly, paradigms converge toward the understanding that the Web seems to dissolve multiple hierarchies that once structured political (1) and economic (2) dynamics, replacing them by less-centralized and governable forms of organization, but diverge on how precisely this convergence occurs. A more critical view, however, demonstrates that another aspect, mostly theoretically ignored by those authors, is crucially embedded in the two issues:

3) How the Internet relates to the exercise of power in processes of government and information management.

Power is an inevitable element in describing the construction, sustenance and crumbling of any hierarchy. When it is argued that networks empower people with information and voice, render states powerless, enable the perfect control machine and challenge the origin of the 'rule-making power' (Mueller, 2010: 2), what exactly is meant by power? Is it power to accomplish something, power over other agents? How it is constructed, justified and maintained? How is it related with pre-Internet regimes of power? There are no clear answers. This is a significant gap, given that, as DeNardis (2014: 23) puts in an underdeveloped assertion, '[g]overnance is the exercise of power'.

Obviously, I do not intend here to directly answer those three controversies. Not only due to the limits of this dissertation, but also because my central concern is not to theorize Internet governance (as those paradigms do), but to examine how it can be imagined. This is a

different analytical stance, and one that allows for a fairly effective and distanced, albeit never complete or neutral, critical analysis of highly unsettled debates. As Calhoun (2002: 152) says, to talk about imaginaries is 'to assert that there are no fixed categories of external observation adequate to all history'.

Therefore, in place of directly responding to those three open problems, this dissertation aims to critically explore the horizons of their possible answers. This task requires a proper conceptual framework.

Modern social imaginaries and the Internet age

While the concept of imaginary, from a sociological perspective², is strongly associated with Castoriadis (1987), who worked on the role of a supposed ontological imaginary dimension in history change, (Thompson, 1982; Gaonkar, 2002), it is Taylor's (2002, 2004, 2007) liberal approach that is the one adopted here. The imaginary is inserted in Taylor's project to explore what secular Western modernity is and how it emerged from a religious, enchanted world (Abbey, 2000; Gaonkar, 2002). Similarly to Castoriadis' rejection of the Marxist idea that the imaginary, as an ideology, distorts history, for Taylor the imaginary does not falsify the 'real' – in fact, it is an inseparable element of life's constitution, a broad generative background that provides meaning, legitimacy and a normative frame for daily social practices, with which it is dialectally connected.

Importantly, this background is 'carried in images, stories, and legends' (2004: 29) – i.e. in narratives. In the case of the Western world, he argues, an ancient imaginary, in which hierarchies were considered consequences from a-temporal, cosmic and inhuman dimensions, was slowly transformed by a new moral order that ended up becoming the 'too obvious to mention' notion that people, endowed by God with reason and agency, are equal and able to cooperate toward their mutual benefit.

This overview indicates how his theory is connected with the Internet governance debates summarized above. However, there have only been few attempts to explore how the Internet has been imagined. Some (Turner, 2006; Richard, Thomas and Trabsky, 2013) flirt with the concept, but never really pinpoint it. Others (Flichy, 2007; Yar, 2012), despite being theoretically sound, prefer to discuss social imaginaries as ideologies and utopias, and are not primarily concerned with governance. There are also a number of studies interested in communities (Powell, 2008; Kelty, 2005). Mansell (2012), in turn, provides, within a larger

² See Strauss (2006) for an exploration on the imaginary from various disciplines.

MSc Dissertation of João Carlos Magalhães

theoretical proposal, a fully-fledged definition of how Internet governance has been imagined. From Taylor's ideas, she argues that two prevailing backgrounds are often opposed in Internet governance debates.

In the dominant imaginary, technological change is an emergent, unpredictable and mostly autonomous process that creates a neutral global system whose increasing complexity and 'intelligence' is intrinsically positive, as it automates and expands human capabilities, making innovation a priority. Top-down mechanisms of governance are ineffective or too risky. The 'good society' will thus be achieved if states are limited to guaranteeing the scarcity of the information and thus the functioning of a free market.

In the alternative imaginary, the process of innovation that increases the complexity and 'intelligence' of a global system is also emergent, but instead of leading to a loss of control, it allows for decentralized forms of self-governance from below and cooperative mechanisms of production. It is thus the free flow of information in a commons Web that creates the best incentives to enhance production and achieve the 'good society'. The system's neutrality, however, is not taken for granted – private interests may corrupt it. States should be limited to guaranteeing an environment in which information runs free.

On the one hand, these imaginaries agree that states lack the capacity and legitimacy to guide governance, and that this complex system may achieve some kind of beneficial neutrality. On the other hand, their central affirmations are mutually exclusive. When juxtaposed they create (a) the paradox of information scarcity, and (b) the paradox of complexity (2012: 179):

Information scarcity

• Information is costly, and the defense of its property rights creates 'the optimal incentive for creativity, diversity, and growth'.

• Information is cheap to reproduce, and its free distribution is the optimal incentive 'for creativity, diversity, and growth'.

Complexity

- The increasing complexity and 'intelligence' of the technological system are leading to a loss of control.
- The increasing complexity and 'intelligence' of the technological system are leading 'to greater control' within a decentralized system.

Unrecognized, these paradoxes lead to stalemates and impair the Internet age likelihood of constructing 'the good society'. A new imaginary is needed, she argues. Instigated by some 'adaptive actions', it would replace the 'either/or' with a 'both/ and' logic, enabling people to achieve 'greater empowerment, freedom, and responsibility' (2012: 176). It considers, first, how the humans, never neutral and autonomous machines, that foster the evolution of this complex and 'intelligent' system allowing for control through public policies. Second, how the paradox of information scarcity would be considered solvable: it is possible to expand the sharing of information without damaging growth.

Although also concerned with the relation between the Internet and forms of government and information management, power, the third sub area of investigation in this dissertation, is not Mansell's central concern, as she herself recognizes (2012: 34). To be sure, arguments on inequality are dispersed all along her book. Nevertheless, she does not provide an answer to how power could be depicted by the dominant, alternative and new imaginaries. To fill this gap, I will utilize some core elements of Steven Lukes' work.

'Power over': interests and system's bias

Power has generated a seemingly endless discussion (see Haugaard, 2002; Morriss, 2002; and Lukes, 2005: 60-107). Neo-Marxist Lukes (1974/2005) proposes a way not to comprehend the whole, arguably ungraspable phenomenon, but 'only one species of power', namely power as 'power over', as a contingent, ultimately negative domination of one agent over another – his aim is to investigate 'how do the powerful secure the compliance of those they dominate and, more specifically, how do they secure their willing compliance' (2005: 12). In contrast to the influential late Foucauldian notion, power for Lukes is not an ambiguous constitutive matter of any social order that depends on resistance to exist (Downing, 2008), but an element of oppression that must be fought by resistance.

This kind of power can be understood when one thinks of interests of agents and the bias of the social system (Haugaard, 2002). Lukes proposes that the relationship between these elements can be assembled in three views.

In the one-dimensional, liberal view, power is present only when there is an overt conflict of subjective interests – thus it is exercised through decisions made by free individuals that are not influenced by an unbiased social system, and fully enacted through observable behaviour.

In the two-dimensional, reformist view, power is present when there are overt but also covert conflicts of subjective interests. Individuals freely decide what to do, but previous 'non-decisions' alter the neutrality of social structures and stop visible grievances from entering the public arena and being susceptible to decisions.

In the three-dimensional, 'radical view', his own normative argument, power is not only present in overt and covert conflicts of subjective interests, but also, and most effectively, when objective interests are denied through latent, non-observable conflicts. The intrinsic bias of any social structure not only limits what individuals can decide on, but critically constitutes their subjective interests. Objective interests, in contrast, refer to what individuals would choose 'were they able to make the choice', that is, if there was no ideological mechanism to manufacture hegemonic consensuses, in the Gramscian sense.

Different from recent theories on power, narrowly focused on how power occurs in ultra mediated societies (Lash, 2007; Castells, 2009), Lukes' flexible work fits well with the reflexive nature of Mansell's. As she does with the imaginaries, he describes three possible perspectives on power that are based on the same analytical aspects. In addition, he shares with her a normative standpoint, according to which social justice cannot be achieved without locating and questioning the negative outcome of power imbalances. However, his view is limited not only because it is specific, but also because it presupposes the existence of 'real' interests (Krips, 1990; Haugaard, 2002). Thus, the concept has to be cautiously adopted: 'objective' interests will be considered here as the ones that are external to subjective decisions – collective agreements on what constitutes the optimal conditions for human development, such as human rights ³– not as ontological elements external to societal structures, once these structures unavoidably are, themselves, products of regimes of power (Foucault, 1990). I have also opted not to introduce into the framework the confusing (Eagleton, 1990) matter of ideology, as it is not essential here, and would demand a theoretical discussion that exceeds my space limit.

Conceptual framework: Power-informed Internet governance imaginaries

Finally, I would like to advance a possible redesign of Mansell's imaginaries, inserting into them a specific interpretation of Lukes' take on power: the dominant, alternative and new imaginaries are respectively combined with the liberal, reformist and radical views on power. My aim is to answer how power relations would be articulated within Mansell's imaginaries

³ This notion is of course also limited, and aims to simply establish concrete parameters of comparison.

in terms of Internet governance. Thus, interests and conflicts are here the interests of and conflicts between stakeholders in Internet governance processes. Lukes' idea of 'social system' was altered, locating it not in the whole 'socially structured and culturally patterned behaviour of groups, and practices of institutions' (Lukes, 2005: 26), but in the nature of the relation between the Internet (as a technological complex) and this 'patterned behaviour' and 'practices'.

Therefore, from a dominant-liberal imaginary, the technological system's increasing complexity, fueled by innovation, is viewed as inherently positive, insofar as it allows for the development of self-governing, mind- and production-expanding machines that are intrinsically neutral, i.e. totally independent from the social. This neutral technological system thus does not influence stakeholders' subjective interests, which are freely and optimally exercised in governance processes. Given the neutrality of the system and the consequential freedom of stakeholders, power inequalities exist only as overt conflict that can and should be resolved by empowered actors themselves. Given the complexity and neutrality of the system, and the ability of actors to deal with power inequalities by themselves, the role of states should be limited to guaranteeing the economic well functioning of this environment through the maintenance of the scarcity of information – and, occasionally, acting to control securities issues. These conditions would lead to the 'good society'. Example: the strong focus on IPRs enforcement.

From an alternative-reformist imaginary, the technological system's increasing complexity, fueled by innovation, is also considered positive, insofar as it allows both for a communitarian governing of the Internet and for the development of mind- and production-expanding machines. However, in contrast to the dominant-liberal imaginary, these machines are not regarded as intrinsically neutral: they are part of the social system and can get distorted by private interests. Thus, the malleable design of the system may limit stakeholders' capacity to freely and optimally exercise their subjective interests in governance processes. Given that the neutrality of the system and the consequential freedom of stakeholders are not a given, power inequalities exists both in overt and covert conflicts of interests, i.e. the bias might prevent some observable grievances from being acknowledged and tackled. Example: the supposed lack of neutrality in the network that may impair freedom of expression and economic growth/innovation. Given the possibility of system distortion and the inability of stakeholders to fix it by themselves, states should act to restore neutrality that equals the free flow of information in a commons Internet. However, due to their incapacity to deal with the complexity of the system, they should then step back and let

the community govern, dealing by itself with power inequalities and the economic functioning of the environment. These conditions would lead to the 'good society'.

From an eventual critical imaginary, the technological system's increasing complexity would not be considered necessarily positive nor detached from the inherent humanity of its design, i.e. technological and social systems would be imagined to be codependent. Thus, being unavoidably biased, this techno-social system would always influence stakeholders (that would never be a priori free to act optimally in governance processes) and could constitute their very subjective interests on which those actions are based. Given this constitutive capacity of a techno-social system, power inequalities are imagined not only as overt and covert, but also as latent, i.e. the system bias may mask the objective interests of stakeholders. Given the complexity and intrinsic lack of neutrality of the techno-social system and the incapacity of actors to deal with power inequalities by themselves, governments should tackle overt and covert inequalities, but also unveil latent conflicts. They should guarantee that users are able to critically understand the system and its power levers as a whole. Thus, dogmas such as the uncontrollability of the system, the necessity of innovation, the free flow of information or the complete control of information flow would be questioned in favor of social justice - a precondition of the good society. Example: invisible algorithms that from behind the screen can steer people's interests in not-yet-known ways (Lash, 2007; Gillespie, 2014); social platforms whose omnipresence and market dominance leads individuals to accept, as if normal, breaches in their privacy (Lanier, 2012, Mejias, 2013; van Dijck, 2013).



MSc Dissertation of João Carlos Magalhães

Figure 1: Conceptual Framework. Source: the author, adapted from Mansell (2012) and Lukes (1974/2005).

Research objectives and questions

This conceptual framework aims to fill a theoretic gap (the lack of conceptualization of power) through an alternative analytical tool (social imaginaries) to think of the limits of emergence of Internet governance's contentious areas. It will inform a case study whose objectives are:

1) To question the imagined horizons of those areas of contention to contribute to the debate on Internet governance reform.

2) To test and improve the devised conceptual framework, aiming to make a theoretical contribution to the debate on Internet social imaginaries.

These objectives will be pursued through the following research questions:

HOW CAN INTERNET GOVERNANCE BE IMAGINED?

RQ1: WHAT CAN BE IMAGINED WHEN INTERNET GOVERNANCE IS IMAGINED?

RQ2: HOW CAN THE ROLE OF STATES BEFORE MARKETS AND COMMUNITIES IN THE GOVERNANCE OF THE INTERNET BE IMAGINED?

RQ3: HOW CAN THE GOVERNANCE OF THE INFORMATION FLOW IN THE INTERNET BE IMAGINED?

RQ4: HOW CAN POWER IN INTERNET GOVERNANCE PROCESSES BE IMAGINED?

I shall now explain the methodology that will guide the empirical study.

RESEARCH DESIGN AND METHODOLOGY

Choosing a case

Before detailing the methodology and procedures of this study, I would like to further explain the choice of the Brazilian Marco Civil public consultation as the case to be studied here.

It was initially assumed that a developing country⁴ is an interesting choice if the objective is to question the limits of the Internet governance imaginary, as governments from those nations have been a disruptive force in diplomatic debates on this theme. During the WSIS (2003–2005), some of them were 'implacable in their opposition to the prevailing regime' (Malcolm, 2008: 335), pushing for the internationalization of the then USA-backed ICANN, advancing serious questions to the private-centered governance model (Mueller, 2010) and demanding a culturally diverse cyberspace (Kummer, 2007) – roughly the same issues raised by Snowden's revelations. Historically, their position is inserted into a more than 40-year-long debate on how to govern global media systems and harness communication flows to preserve local diversity and diminish inequalities between rich and poor countries (see

⁴ The use of terms such as 'developing' is an ideologically loaded problem (Escobar, 1995). Here, it is adopted to merely highlight the general socioeconomic differences between countries.

Macbride, 1980; Nordenstreng, 2011; Mansell and Nordenstreng, 2006). Indeed, the Summit was originally designed to discuss the expansion of access to ICTs and the bridging of a multidimensional 'digital divide' between South and North nations (Mansell and Raboy, 2011; Chakravartty and Sarikakis, 2006), but this more traditional 'media development' agenda unexpectedly overlapped with governance dilemmas (Souter, 2007).

A leading developing country (Alden, Morphet and Vieira, 2010), Brazil has been trying to take the lead in Internet governance processes at least since the WSIS. The Marco Civil, which establishes several fundamental civil rights for individuals, state and companies in the Internet such as privacy, freedom of expression and net neutrality, is one of its most celebrated initiatives (Knight, 2014). The idea of an Internet bill of rights is not new (Jørgensen, 2013), but the Marco Civil was one of the first to be adopted. It has been deemed an exemplary proposition of governance by figures such as WWW co-inventor Tim Berners-Lee (Mann, 2014).

However, if the objective is to investigate social imaginaries, the text of the bill approved by the Brazilian Congress on March 2014 is not ideal. Being the result of a process ultimately undertaken by few policymakers from the political establishment of an especially unequal democracy (Holston, 2009), it is less able to present the diversity of ways in which Internet governance can be imagined. In fact, beyond the celebratory approach, some authors have already criticized the bill, saying that, in consonance with the interests of tech companies like Google, it overemphasizes freedom of expression to the detriment of other rights (Thompson, 2012).

Whether this is the case is beyond the scope of this dissertation, which will focus on a much less studied part of the Marco Civil: its online public consultation. It cannot be mistaken for the bill itself, as it was designed to inspire it, but in a non-binding way. That is, the conclusions of this study cannot be extended to the Marco Civil legal text.

If it would also be naive to say the consultation expressed the 'people's voice' (see the limitations below), it clearly made possible a higher level of narrative diversity than the one usually expressed in the mainstream political arenas. First, explicitly trying to emulate the 'participative' nature of the Internet (Schulz, 2014), the consultation was accessible for anyone with an Internet connection. Second, copying the intuitive mechanism of a news site comments tread, and using no rules to censor the contributions (which could also be made anonymously), it encouraged participation and enabled the conditions for a fairly unconstrained process (Nolasco, 2014a).

It had two phases, between 2009 and 2010 (Nolasco, 2014b). During the first phase, contributions were prompted by three generic conceptual axes, gathering 636 contributions. From them federal officials and academics formulated a first draft of the bill, with 34 articles. This draft was the basis for the second phase of the consultation, which, different from the first one, discussed the draft's articles, not general concepts, generating a higher number of contributions (1,318), which were at the same time more specific and varied (Nolasco, 2004a). From this second phase results, a new and final draft was sent to the Brazilian Congress, in which the bill suffered various transformations.

Methodology

To assess the contributions, a qualitative content analysis (QCA, hereafter) was employed. Generally, at least three reasons widely discussed in the literature (Weber, 1990; Neuendorf, 2002; Hansen et al, 1998) justified my decision. First, to systematically explore the various ways in which key elements of Internet governance are imagined, my work needed a technique that could afford the observation of general patterns and trends to undertake concrete comparisons of different narratives, and thus different imaginaries. Second, to map out these differences in a significant way it was necessary to understand the consultation as a whole, involving thus a large number of texts to be assessed. Third, in contrast to the apparent abstractness surrounding the social imaginary, the conceptual framework developed above provided elements from which general and concrete variables and categories could be derived – even in the case of matters regarding power, a typical theme of discourse analysis techniques (Fairclough, 2001), a methodology that could have been used to examine this case, but not to achieve the answers pursued here.

However, this study distances itself from what can be called a 'quantitative' tradition, in which content analysis is understood as a way to describe 'the manifest content of communication' (Berelson, 1952: 18; see also Lasswell et al, 1952). Such a perspective is doubtful if the objective is to code narratives that express social imaginaries, since these accounts are not 'manifest' but rather embedded in opinions, hidden in confusing masses of texts, conveyed in metaphors, and articulated through dialogues.

That is, to find and code imaginaries in a systematic way, a certain level of in-depth textual assessment is required. Thus, I have chosen a qualitative standpoint, combining Krippendorff's (2004) and Schreier's (2012) approaches with specific elements proposed by Flick (2009) based on Mayring (1983).

From their less positivist and more self-reflexive points of view, the very differentiation between quantitative and qualitative is misleading, as 'all readings of texts are qualitative, even when certain characteristics of a text are later converted into numbers' or examined by human-made machines (Krippendorff, 2004: 16). Content and meaning are not manifest, external to the observer, but latent elements, the result of the very research process. Content analysis, even in general terms, is then perceived, in line with early critics of the quantitative approach such as Kracauer (1952) and George (1959), as 'a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use' (Krippendorff, 2004: 18).

Within this larger tradition, QCA has been defined as 'a method for systematically describing the meaning of qualitative material [...] by classifying parts of your material as instances of the categories of a coding frame', being 'suitable for all material that requires some degree of interpretation' (Schreier, 2012: 20,). That is, it deals with the 'quantitative' aspiration to devise valid, systematic and replicable descriptions of meanings, and with the 'qualitative' need to create, through interpretation, the very meaning that will be systematized. Nevertheless, its application requires at least one specific technique – the reducing of data to limit the analysis 'to relevant aspects of the material' and later 'subsume the specific information under a more general concept' proposed in the coding frame (Schreier, 2012: 20; Groeben and Rustemeyer, 1994; Mayring, 2000). According to Flick (2009: 325), this process demands summarization, i.e. reduction and paraphrasing (see my scheme, below).

Access to and treatment of the data

The data, requested from the Brazilian federal government, was gathered in two files, containing the contributions made in both phases of the consultation. These texts were sampled and then analyzed on Excel and SPSS software.

Sampling

A sampling procedure was operationalized in three steps. First, I decided to focus on the second phase of the consultation, which generated, as said, a considerably larger number of comments on more specific subjects. Second, a sample size was defined. According to Neuendorf (2002: 88), there is no universally accepted criterion to decide on this issue, and a common practice is to base it on what has already been done by other authors. However,

content analyses of consultations processes are relatively rare (see though Emke, 1994) and no sampling technique seems to be established. Thus, I decided to sample around 25% of the contributions, allowing for a manageable and, under certain conditions ⁵, statistically significant number of 300 texts (the units of analysis). Third, a form of stratified sampling was conducted (Krippendorff, 2004: 115) to respect the a priori different weights that different subjects had in the consultation. Hence, the subpopulations were considered to be the clusters of contributions made to each of the 34 articles of the draft. The percentages of each of those 34 subpopulations in the total number of contributions were calculated and their proportions were respected during the choice of the sample – made through an online randomizer tool⁶. That is, if an article gathered 10% of the contributions, it formed 10% of the sample.

Coding frame (see Appendix A)

The coding frame was mostly derived from the conceptual framework and, following Schreier (2012: 35) on QCA inductiveness, from two pilots involving 30 texts (10% of the corpus). The operationalization of the research objectives through the coding frame was crucial, given the abstract categories that I wanted to code. To cope with the task, the social imaginaries from the conceptual framework were dismantled into conceptual pieces and scattered along the variables. Each imaginary was represented by one category in the main variables (see Appendix A to visualize these divisions), although not in a mutually exclusive way. Importantly, this procedure presupposed that the imaginaries were not composed of fixed units, but of malleable, interchangeable units. It was also assumed that the absence of some imaginaries' characteristics could represent meaningful information – thus, most of the variables also had the category 'issue not present in the text'.

Variables were formulated as questions and divided into five dimensions. The first examined contributions' factual characteristics (name of the author, date and length of text). However, it was not taken into account as it proved to offer no analytical value. The second dimension of variables tried to measure who imagined what, i.e. to what category of stakeholder the author of the contribution belonged and what element of Internet governance the text was about. The results demonstrated that the majority of the participants were indeed regular Internet users. However, in a conservative measure, this variable also had its data ultimately

⁵ The statistical significance is based on Krippendorff (2004: 122): if the researcher assumes i) 'the probability of the rarest relevant instances' to be 1 in 100, and ii) that a suitable 'significance level of the answers to research questions' is .05, a sample of 299 texts would provide the researcher with '95% certainty that it includes at least one of these instances'. ⁶ ⁶ http://dfreelon.org/utils/recalfront/recal2/

dismissed: searches on the Internet demonstrated that at least some of the most active contributors did not properly identify themselves – a minority of them were academics. The 'what' of the contributions initially used the taxonomy suggested by DeNardis (2013), but was enriched by the pilots. The third dimension tackled the second RQ (research question); the fourth dimension classified contributions' take on the management of the information flow (RQ3); and the fifth dimension assessed how power in Internet governance processes was

imagined (RQ4). total of 84 Therefore, the final analysis revolved around 19 variables and a categories.

Inter-coder reliability

Myself and a second coder, also an LSE Media and Communications student, worked in two pilots. After several adjustments, and the adoption of the QCA, Krippendorf (2004: 221-230) inter-coder reliability coefficient achieved an agreement of over 80% in every variable, according to the online platform Recal26. This level is considered satisfactory (Krippendorff, 2004: 241).

Reduction and paraphrasing (see example in Appendix B)

To strengthen this study's replicability and validity, but given its specificities and time constraints, I opted to change and simplify a proposition made by Mayring (1983: 57, cited in Flick, 2009: 325), setting up my own rules of summarization. Roughly, his method advances a structured effort made up of 15 steps to reduce and paraphrase the text before coding it. In contrast, this present study, albeit respecting Mayring's major recommendations, followed four steps. First, parts of the text whose content had no importance to the research questions were excluded. Second, the remaining parts were submitted to a variable-driven segmentation (Schreier, 2012: 120–128), that is, marked and divided into units related to each of the variables (when possible). Third, and in consonance with the assumption that social imaginaries are expressed in narratives, these units were paraphrased into basic 'stories' that aimed to summarize the specific notion conveyed in the text about how the Internet is/should be governed. Fourth, the variables, in the form of questions, were applied to these micro-narratives. When no 'story' could provide a response to the variable, the variable was categorized as 'issue not present in the text'. See the scheme below to visualize the workflow.



Interviews

The initial idea was to adopt a hybrid methodological approach, contextualizing QCA with interviews. However, given the aforementioned restrictions regarding participants' identification, I was unable to find the necessary number of interviewees to form a truly diverse sample. Therefore, I decided to carry out just two interviews, with a cyber law academic and active contributor to the process, who decided to stay anonymous, and Guilherme Almeida, a federal official who led the design of the consultation. As these interviews merely provided factual details of the process but did not address my research questions, they will not be referred to nor methodologically problematized.

Limitations and ethical issues

The corpus has important biases that must be acknowledged. First, the consultation was a biased process itself, inasmuch as it can arguably have attracted people that favor state regulation and have some kind of knowledge of Internet governance and technical functioning. Second, there is a methodological bias: despite the openness of the platform, the process was based on pre-established guidelines, which most certainly influenced the nature of the contributions. Third, the consultation was class-biased: being online, it was probably dominated by people from Brazilian economic higher-classes, given that half of the country's population do not have Internet access (World Bank, 2013). In sum, although these biases do not invalidate this research, it would be incorrect to assume that the data can be straightforwardly generalized.

As any content analysis, this study can identify general patterns and allow for comparisons but cannot provide answers regarding causes and motives (Hansen et al, 1998; Bauer and Gaskell, 2000). In addition, the summarization of texts demanded by QCA, itself the product of a subjective interpretation, leads to loss of information (Schreier, 2012: 15). In spite of the high inter-coder reliability coefficients, this study would have benefited from a third coder. Although the contributions are in the public domain, this study conservatively decided not to refer to any name/nickname of any author, due to ethical reasons.

RESULTS, ANALYSIS AND DISCUSSION

In the first section of this chapter, the study's results are presented and the findings about each of the sub research questions are outlined. Following Schreier (2012: 197–205), some quotes from the sample will be displayed to illustrate the numerical results.

Results and analysis

RQ1: What can be imagined when Internet governance is imagined?

Texts' topics were further grouped around four main areas: communications-related rights (privacy, freedom of expression), economic-related rights (intellectual property rights and consumers rights), computation-related issues (management of critical resources, security, infrastructure and protocols) and the bill itself. Albeit sometimes overlapping, these divisions proved helpful to think of the results in a broad sense.

Each contribution could be classified as being about multiple topics simultaneously. That being said, 79% of the texts discussed have, among their topics, at least one related to communications rights.

MSc Dissertation of João Carlos Magalhães



Communications-related rights Economics-related rights Computational-related issues Bill itself



Given the predominance of the communication area, it's worth trying to break down its data. Perhaps unsurprisingly, when the participants expressed an opinion about freedom of expression (present in 47% of the texts analyzed), they almost unanimously (95% of them) argued to defend/expand it. Similarly, 9 out of 10 topics on privacy (discussed in 35% of the sample) were favorable to it.

MSc Dissertation of João Carlos Magalhães

Still within the communications-related rights area, the possibility of users' identification, in which privacy and freedom of expression are pitted against each other, emerged as a rather important theme in the Marco Civil consultation, present in more than one third of the contributions (109 of them). Generally, two problems scattered in the draft's articles prompted the debate – first, how to treat access and connection logs and to what extent they should be disclosed/stored by tech companies; second, the question of whether anonymity had to be a principle of the Marco Civil or explicitly forbidden by it. The proportions supporting each side are almost even, demonstrating how controversial the issue was: 52% of the contributions that expressed an opinion about it considered that people must be somehow identified, but 48% of them defended the importance of guaranteeing users' anonymity.

Following DeNardis (2013), the matter of network neutrality (see Marsden, 2010) was coded as part of the discussion on freedom of expression. However, despite being present in multiple articles of the draft, it was barely an issue in the consultation: only 23 out of 300 contributions expressed an opinion about it (82% of them positive).

In the economic-related rights area (as a whole, present in 17% of the texts analyzed), IPRs, which were not cited in the draft ⁷, were also a non-question of the consultation: only 5.7% of the sample referenced them (more on this below).

Consumers' rights were discussed in more than one tenth of the contributions. This subject was not present in the conceptual framework, but got incorporated into the coding frame after the pilots.

Computational-related issues are present in 21 % of the texts, but are rarely treated simply as a technological problem: more than two thirds (67%) of the contributions in which these issues are present picture them in relation to communications-related rights.

Another topic inserted into the coding frame after the pilot was what I shall call 'the bill itself', present in a significant proportion of contributions (31%). This subject refers to forms of self-reflexive narratives in which doubts, questions and criticisms about the Marco Civil or its consultation were explicitly expressed. The following is a typical contribution on the bill itself. It argues that, given the supposed sacrality of the Web, any movement to govern it must require a thoughtful action.

⁷ According to the interviewee Guilherme Almeida, IPRs were left outside the draft because they were already being discussed in another public consultation.

To sum up, in relation to RQ1, data suggests that consultation participants imagined an Internet governance in which:

- Freedom of expression and personal privacy are the central topics;
- The very mechanism of governance is actively questioned;
- Computational issues are not central topics, and are generally related to communications-related rights;

• Network neutrality and intellectual property rights are not as central nor as controversial as other issues, such as users' identification.

RQ2: How the role of states before markets and communities in the governance of the Internet can be imagined?

The coding frame provided four variables to investigate the second research question.

The first variable classified contributions in terms of how they depicted the role of legislation in Internet governance processes. The most prevalent narrative in the sample (65% of the texts analyzed) argued for an a priori unlimited capacity of states to legislate on Internet issues. Eleven out of 100 contributions, on average, rejected any form of legislation, although without presenting a clear reason for that, or argued that Internet legislation should only guarantee market functioning. And only 4% of the narratives defended that legislation should guarantee community sovereignty.



A second variable measured how the narratives embedded in the contributions depicted the ability of states, markets and communities to control the complexity of the system (as defined in the conceptual framework). Results suggest this was hardly a central aspect of the consultation: 67% of the texts did not mention it at all, 13% of the texts argued this complexity might be tamed by public policies, 12% of the contributions claimed that the system's evolution indeed impairs any possibility of control, and 7% of them defended the capability of an empowered community to control the system by itself.

A third variable determined which actor, according to the texts, is the optimal leader of governance processes. According to the results, states largely prevail over communities and private actors as ideal leaders.

MSc Dissertation of João Carlos Magalhães



The following excerpt illustrates a very common argument among those who favored state leadership: states are the only resort against the subjective interests of users and companies.

I do not think one can dispense judicial review and specific orders to withdraw content, since deciding on the legality ... of any material...is something necessarily subjective, in addition to being the exclusive prerogative of the Judiciary, and not the users or providers. (Contribution 2, my translation)

Lastly, contributions were coded in terms of how they described the management of public investment in Internet-related matters. The most important result is that 8 out of 10 texts of the sample do not discuss this question at all. The absence cannot be considered an outcome of the draft design, as it had multiple articles dealt, directly or indirectly, with propositions to ameliorate the 'digital divide'. In the rest of the texts, narratives that proposed the enhancement and expansion of points of access and investment in in-depth critical education prevailed among a plethora of possibilities.

To sum up, in relation to RQ2, data suggests that consultation participants imagined an Internet governance in which:

- State sovereignty is the most legitimate form of government;
- This prevalence is realized in several ways: legislating about whatever issue needed, leading actual governance processes, and exercising its ability to control the complexity of the system;
- Most people, however, might not be aware of this complexity;

• Public investments in the Internet, such as the ones needed to bridge the 'digital divide', are not a central concern.

RQ3 - How can the governance of the information flow in the Internet be imagined?

Two variables measured how narratives depicted the governance of the information flow in the Internet. The first one classified the texts in order to know how they positioned themselves in relation to IPRs. As already shown above, this was a non-issue in the consultation: more than 90% of the contributions did not discuss it; around 4.6% of the texts argued against IPRs; 1.3% defended IPR's enforcement; and only 1% of the contributions explicitly defended a critical view.

The second variable also classified narratives' take on the information flow. But instead of focusing on a specific question (as IPRs), it aimed to code narratives in a generic way, asking them: should information run free or be somehow limited? From the total of texts analyzed, 38% defended the free flow of information and 11% argued for some kind of limit. But, in perhaps the most noticeable result of this variable, more than one quarter of the sample conveyed critical narratives. In this case, a critical text would question the opposition between free flow/limited flow, and/or propose flexible initiatives (such as the mediation of public authorities) in order to make the most of the technology without ignoring the necessity of a human-centric approach.



Critical contributions might be exemplified by the following text.

'Internet service providers make and should make several choices... that do not side with the idea of neutrality. [I]'m *favorable to many of the net neutrality principles*. [But] I do not believe the network is neutral. ISPs could only be neutral if they could make no normative judgment in relation to users (Contribution 3, my translation and emphasis)'

This contributor is not defending or criticizing Internet Service Providers' capacity to profit out of an 'non-neutral' information flow, but questioning the very idea of neutrality. At the same time, he does not oppose the background of net neutrality discussion, i.e. the efforts to establish online freedom of expression as a principle.

To sum up, in relation to RQ3, data suggests that consultation participants imagined an Internet governance in which:

• IPRs debate is not a central question;

• The information must be free, but critical standpoints regarding the governance of the information flow are not marginal.

RQ4: How can power be imagined in Internet governance?

This dimension is comprised of eight variables. They were clustered around three main issues: interests, system's bias and the state's role. First, this study classified texts in relation to how they depicted stakeholders' interests in governance processes. The largest chunk of the texts analyzed (42%) described interests as objective. That is, according to the particular notion adopted from Lukes (1974/2005), interests appeared in these narratives not as exercised and constructed mainly through consensuses among actors, but as derived from collective values that externally preceded, and sometimes contradicted, subjective agreements.

Usually, these values were considered as optimally enforced by the judicial system, as the example below shows.

'Only a judge can decide to remove the content. It cannot be a relation between the offended [person] and the provider. Anyone can say it was offended by someone. What about freedom of expression and the right to information? (Contribution 4, my translation)



Figure 7 - Nature of stakeholders' interests

Nevertheless, it was not uncommon that a contribution arguing for freedom of expression, for instance, described it as best expressed through the state-free, subjective action of rational stakeholders, i.e. conveyed a 'defensive view' of speech rights (Stein, 2004). Indeed, 37% of the total contributions described interests as mainly subjective.

Yet the mere existence of interests is not enough to characterize power relations: it is necessary to understand to what extent these interests are portrayed as conflicting with others. Among the contributions in the sample, almost three quarters of them (72%) gave an account of some sort of conflict, that is, depict relations between stakeholders as relations informed by power. Interestingly, if compared with the results on the interests' nature, most of texts' narratives described visible conflicts (consistent with the two predominant imaginaries), and only 1% described them as latent (consistent with the critical imaginary).

Here is one example of contribution that, to defend the legal provision of access logs storage, says:

'Providers may be reticent to inform a user of his IP number in a given date. This delay could harm the investigated party, for if he has his network hijacked and misused (as for the practice of a crime), with the delay by providers the traces of unauthorized access are deleted and the investigated becomes the only suspect. (Contribution 5, my translation).

MSc Dissertation of João Carlos Magalhães

It is important to take a closer look at this short but telling excerpt. On the one hand, it describes a kind of interest that is not simply subjectively defined by the actors involved in the conflict (Internet Service Providers and users): even if they could reach a consensus on the storage of the logs, an external actor (the government) still would have to assert the legality of this eventual arrangement. On the other hand, the text narrates a conflict that not only is observable, but does not even consider the possibility of latency. This form of specific contradiction, that merges central elements from the radical and the liberal/reformist imaginaries, is present in 109 contributions – more than one third of the whole sample and half of the contributions that indeed addressed some form of conflict of interests.

Another valid question is: whose interests are opposed to whose interests? One variable aimed at the frequency of 'conflictual pairs'. Among the predictable myriad of possibilities, three stood out: users x users (21%), users x companies (19%) and users x states (10%). Other variables counted which actors were most often portrayed as oppressor and/or oppressed parties (to use the characteristic vocabulary of the 'power as domination' debate). Regular users prevailed in both categories, but more markedly as the oppressed (59% of the sample) rather than the oppressor (26%). Private companies are described as oppressors in 19% of the contributions, and as oppressed in 5% of them. Importantly, states do not represent a significant percentage of either category. And only a minor proportion of narratives (4%) described conflicts of interests as unclear, that is, without a clear personification of the relation poles.

Another essential feature of power, according to the conceptual framework, is how the bias of the system is grasped. Again, this was barely a question in the consultation. The majority of the texts (70%) did not debate this problem whatsoever, i.e. at no point did their narratives consider whether the social shaping of the Internet affects power relations in Internet governance processes. Among those that indeed discussed this issue, the majority depicted the system as only potentially biased.

MSc Dissertation of João Carlos Magalhães



A last variable asked texts the following question: should states intervene in order to rebalance those power relations? Despite the fact that 45% of the sample did not address this issue at all, state importance is clearly reinforced, as 39% of the texts consider this intervention legitimate, while only 16% of them portray markets or communities as apt to independently deal with these relations.

To sum up, in relation to RQ4, data suggests that consultation participants imagined an Internet governance in which:

- Conflicts of interests, as power relations, are pervasive and justify state intervention;
- Stakeholders interests are mainly characterized as objective, which is consistent with a critical imaginary;
- Conflicts between these interests are, however, mainly observable between the dominant-liberal and reformist-alternative imaginaries;
- System's bias is only rarely taken into account to think of power relations;
- Users are the central actors of power relations, albeit more as oppressed than oppressors.

Discussion

After explaining how the results can respond to the research sub-questions, I shall now articulate those responses in order to provide an answer to the general research question.

According to the conceptual framework that informed this empirical study, two ways of imagining the governance of the Internet prevail among stakeholders. They share the belief that states lack the legitimacy and ability to govern the Web, and power inequalities are more or less self-fixable accidents, but diverge in how to deal with the scarcity of information and the consequences of the increasing complexity of the Internet to its controllability. A third imaginary – the critical one – was defined as a possibility that, properly encouraged, might bring the Internet age closer to the ideal of 'the good society'.

As expected when an idealistic classification is confronted with non-theoretical realities, the study of the Marco Civil consultation points to a much more nuanced picture. Specifically, its results complicate the conceptual framework in three linked ways: they defy the predominance of the dominant-liberal and alternative-reformist imaginary; call into question the centrality of the paradoxes of information scarcity and complexity; and point to a different area of friction.

A hybrid critical imaginary

Let me explain the first point. The previous section made clear that the prevailing imaginaries were not as prevailing in the case studied as one might expect. The majority of the Brazilian citizens and organizations that participated in the consultation clearly considered, consistently with the critical imaginary, that it is the state, not companies or organized communities, which represents the most legitimate and efficient actor to govern the Web. States, they predominantly narrated, should not simply enforce IPRs, guarantee net neutrality or defend the online environment from security threats (three non-issues of the consultation), but unrestrictedly legislate on Internet, lead its governance processes and intervene in power relations. Furthermore, this 'state-centric' (Mueller, 2010) imaginary does not corroborate a simplified understanding of governments from developing countries as 'not very happy with the rapid and innovative changes on the Internet, both economically and also with regard to speech [rights]' (Malcolm, 2008: 335) or narrowly eager to bridge the 'digital divide'. First, because the prevalence of the state is not uniform: a market-based approach is present in a considerable proportion of texts, as the results of the second dimension have shown. Second, because the matter of expanding the networks and points of access was almost ignored; and third because states were imagined as the optimal conveyors, not deniers, of almost unanimously defended democratic rights. In addition, geopolitical confronts were inexistent in the consultation. This focus on the need to enforce rights through public policies is arguably connected with the prevalence of narratives that depicted

interests in power relations as mainly objectives – another central attribute of the critical imaginary.

However, it would be misleading to merely consider this case as a finished example of the prevalence of the critical imaginary. Although the role of the states before communities and markets was prevailingly imagined in a critical way, the inquiry into the management of the information flow and the power relations presented ambivalent results. We could conclude that the imaginary that prevailed in the case studied is hybrid critical: it strongly expresses elements of the critical imaginary, but does not exclude dominant-liberal nor alternative-reformist narratives. Yet this is only part of the general answer. It is still necessary, following Mansell's (2012) preoccupation, to investigate the nature of this hybridity; this leads to the second way in which the results complicate the framework.

Reassessing the paradoxes

The paradoxes of complexity and information scarcity were not the central areas of contention during the Marco Civil consultation.

In relation to the flow of information, even if we discard the results concerning IPRs as a consequence of the non-introduction of this theme in the draft, the data does not support the centrality of the information scarcity paradox. The variable that measured the general predisposition on how to govern the flux of information constructs in opposition not the alternative-reformist and the dominant-liberal imaginaries, but the alternative and the critical ones. In fact, the significant frequency of narratives expressing a critical imaginary by itself relativize the importance of this paradox. That is, even without the proper data to understand how the participants understand IPRs enforcement, we could arguably infer, given the results of the general variable, that they are not as divided about copyright as the paradox would suggest. Naturally, only further inquiries could provide an assertive answer to this question.

In relation to the paradox of complexity, the problem is similar: narratives hardly addressed this issue. But, different from the matter of IPRs, this result has little relation to the shape of the draft discussed in the consultation, as system's complexity is not a concrete object of governance, thus most likely would never explicitly be part of the draft. In fact, computational issues in general, even those usually linked to rights such as net neutrality were not at the centre of the consultation debate whatsoever. Even if we consider only the texts in which complexity was part of the narrative, the polarization still occurred between

the critical and the dominant-liberal imaginaries – not between the latter and the alternative one.

The results of this study point to a scenario in which the inter-imaginaries conflicts seem to be less between the two prevailing imaginaries than between them and the critical one. Furthermore, the data on how power is imagined provides evidence that this conflict is not only inter- but also intra-imaginary.

A paradoxical way of imagining power

The majority of the contributions presented some form of hybridism, and the complete analysis of them is beyond the limits of this dissertation. I thud want to focus on how the characterization of power relations, as argued above, entailed a specific and significant kind of contradiction, in which stakeholders' interests are described as objective, but the conflicts they generate are portrayed as merely observable, and thus subjective. We may tentatively call it a theoretical 'paradox of power', as it merges two theoretically exclusive notions into one that seems to make sense in reality, as the example above exemplifies. Different from the paradoxes described by Mansell, this one is not the result of a conflict between elements from different imaginaries, but of elements within the same imaginary.

This intra-imaginary paradox suggests not a battle of grand narratives but a structural difficulty in depicting inequalities in Internet governance processes, at least in Lukesian terms. The texts marked by it critically identify the aim of recognizing imbalances, i.e. guaranteeing the fulfillment of actors' objective interests, but do not grasp the mechanisms through which these objectives are denied, i.e. making conflicts invisible. This study design does not allow for any objective answer to why this is the case, but its data underpins at least one hypothesis that could be considered in further research. It is related to the widespread lack of attention of narratives to the bias of the system: 73% of the contradictory contributions either do not mention this issue or depict it in a liberal, uncritical way. It is not a surprise that the variable that classified the nature of the conflicts of interests is strongly associated with the variable that coded how texts depicted the bias of the system (Chi-square pvalue < .000). According to Lukes, it is impossible to deconstruct domination architecture without accepting that the lack of neutrality of the social system is sustained not only by 'a series of individually chosen acts, but also ... by individuals' inaction' (Lukes, 2005: 126); that is, to develop an efficient critique of power requires a more subtle and intense attention to how power works. The sociology of technology has a useful concept for this form of ingrained bias: the notion of 'black box', inside which 'inscriptions, knowledge, information, alliances
MSc Dissertation of João Carlos Magalhães

and actions' are frozen, becoming 'invisible, transportable, and powerful in hitherto unknown ways as part of socio-technical networks' (Star, 1991: 32). It seems reasonable to suppose that the paradox that emerged from my examination is related to the narratives' dismissal of the question of bias. But only new research can truly examine the accuracy of this hypothesis and, in general, how this theoretical paradox is expressed in reality (and what kind of consequences it entails).

To sum up, this study has offered contributions to the debates on (1) Internet governance reform, and (2) Internet social imaginaries theory:

1) The limits within which the governance of the Internet can be constructed are more ample and diverse than the prevailing imaginaries suppose. States might still have the legitimate obligation to steer 'intelligent' machines and defend rights on the Web; disputes over information management might not lead to a stalemate; power might not be a marginal preoccupation. In Taylor's sense, a critical horizon seems to be more than a theoretical possibility, but already an imaginary – one that has been articulated, even if in hybrid forms, outside academic and technocratic circles. Therefore, there already exists, at least in specific contexts, conditions for Brazilian policymakers to discuss more heterodox changes, perhaps even more profound than the ones conveyed by the Marco Civil final text. Simultaneously, the intra-imaginary 'paradox of power' points to the necessity to invest in public policies able to give individuals the capacity to critically assess inequalities.

2) The 'power-informed social imaginaries of Internet governance', despite their theoretical specificities, proved to be a helpful tool. From the empirical work, two elements could be aggregated to it: the malleability to create hybrid models from different imaginaries' elements, thus paying attention to intra-paradoxes; and the addition of other important areas of Internet governance debates ('the governance itself' and 'consumers' rights').

Finally, it is crucial to delineate some of the limitations of these findings. First, they are limited by my conceptual options – power and social imaginaries might be diversely theorized. Second, those results do not prove that this hybrid critical imaginary and the 'paradox of power' are certainly present in any reality. In the same vein, these findings do not support the argument that net neutrality, IPRs or the 'digital divide' are indeed unimportant issues. When the Marco Civil was discussed in Brazilian Congress, for instance, net neutrality was the central controversy (Ermert, 2014). Third, it is not my intention to say that these

results demonstrate that the Marco Civil and the Brazilian approach to Internet governance should be uncritically taken as a model.

This dissertation argues that, beyond the mainstream political and academic arenas, there are other significant forms of imagining Internet governance that deserve attention from researchers and policymakers.

CONCLUSION

In consonance with the Web's still incomplete nature (Feenberg, 2011), Internet governance, as a practice and a theoretical debate, seems to follow the same pace of incessant reinvention. However, what are the limits of this movement? Could the post-Snowden agenda promote more than a 'Lampedusan overhaul' (The Economist, 2014), changing some things in order to preserve the status quo, as famously said by a character from Tomasi di Lampedusa's novel 'The Leopard' (1958)? According to this dissertation, at least in specific realities, yes.

Using the social imaginary as a tool to explore the horizons within which Internet governance can emerge, this dissertation examined the public consultation designed to underpin a post-Snowden celebrated initiative (the Brazilian Marco Civil da Internet) and concluded that a significant number of the consultation contributions articulated narratives strongly influenced by a critical imagination. States, rights and inequalities are far from being anachronic actors and matters or the preoccupation of only academics, data suggests. What seems indeed to be confirmed is the unsettledness of the debate – and not only due to Mansell's inter-imaginaries paradoxes of information scarcity and complexity, but also because to imagine power in governance processes emerged from this empirical investigation as a difficult, paradoxical task. These results point to the possibility of even more profound changes in Brazilian Internet governance, changes that may be able to open up Internet 'black boxes' and pay greater attention on the 'unequal power relationships that influence who has the knowledge necessary to decode *algorithms* of codified information' (Mansell, 2012: 186).

Yet these results are not only limited, but also insufficient. Even the Marco Civil demands more academic attention, as the long and convoluted process through which that consultation was transformed into a law constitute a rich case to understand how participation, political interests and private lobbies interact in actual governance negotiations. Interviews could critically recapitulate its development as a whole. And the general research question of this dissertation could only be satisfactorily answered through a multidisciplinary and multi-methodological research, able to assess global and national organizations practices that are transforming Internet governance imaginaries. A project like that would also be in a good position to investigate to what extent the trends observed in the Marco Civil public consultation are present in other realities.

Lastly, this study has suggested that, if the Internet governance is increasingly central and fragmented (DeNardis, 2014; van Eeten and Mueller, 2012), it demands an ampler research palette. Beyond technology, governments and global institutions, it is time to listen to individuals' voices (Beer, 2009; Couldry and Powell, 2014; Couldry, 2013). As expressions of specific societal and cultural dynamics (Wilson, 2004), they are essential to critically assess the operations of 'creative adaptation' (Gaonkar, 2000: 18) that will continue to mediate the social shaping of the Internet.

NOTES

I have also written on Internet governance and social imaginaries, but in a very different way, in a summative essay produced for the LL4S1 (Cyberlaw) course.

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REFERENCES

Abbate, J. (1999) *Inventing the Internet*, Cambridge, MA: MIT Press.

Abbey, R. (2000) *Charles Taylor*, Teddington: Acumen.

Abramovay, P. (2014) Brazil's Internet Constitution, URL: http://www.huffingtonpost.com/ pedro-abramovay/brazils-Internet-constitution_b_5274633.html [Last consulted 29/08/2014]

Alden, C., Morphet, S., and Vieira, M. A. (2010) *The South in World Politics*, Basingstoke: Palgrave Macmillan

Barlow, J.P. (1996) A Declaration of Independence for Cyberspace, URL: https://projects.eff.org/~barlow/Declaration-Final.html [Last consulted 01/06/2014]

Bauer M.W. and Gaskell, G. (2000) *Qualitative Researching with Text, Image and Sound: A Practical Handbook for Social Research*, London: Sage.

Beckedhal, M. (2014) YES, WE SCAN! Salvaging the Public Trust in a Post-Snowden Germany, in Biddle, E.R., Lemos, R., and Price, M. (eds), Stakes Are High: Essays on Brazil and the Future of Global Internet, URL: http://www.itsrio.org/en/projects/%EF%BF %BCstakes-are-high/ [Last consulted 01/06/2014]

Beer, D. (2009) 'Power through the algorithm? Participatory web cultures and the technological unconscious', *New Media and Society* 11 (6): 985–1002.

Benkler, Y. (2000) 'From Consumers to Users: Shifting the Deeper Structures of Regulation Toward Sustainable Commons and User Access', *Fed Comm* 52: 561-579.

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

Berelson, B. (1952) Content Analysis in Communication Research, New York: Hafner.

Boadle, A. (2014) Brazilian Congress Passes Internet Bill of Rights, URL: http://uk.reuters.com/article/2014/04/23/us-Internet-brazil-idUKBREA3M00Y20140423 [Last consulted 01/06/2014]

Bygrave , L. and Bing , J. (eds) (2009) *Internet Governance: Infrastructure and Institutions*, New York: Oxford University Press.

Braman, S. (2011) 'The Framing Years: Policy Fundamentals in the Internet Design Process, 1969–1979', *The Information Society: An International Journal* 27(5): 295-310.

Brown, I. and Marsden, C.T. (2013) *Regulating Code: Good Governance and Better Regulation in the Information Age,* Cambridge, MA: MIT Press.

Calhoun, C. (2002) 'Imagining Solidarity: Cosmopolitanism, Constitutional Patriotism and the Public Sphere', *Public Culture* 14(1): 147–71.

Cammaerts, B. (2008) *Internet-Mediated Participation Beyond the Nation State,* Manchester: Manchester University Press.

Cammaerts, B. (2011) 'Power Dynamics in Multi-stakeholder Policy Processes and Intra-civil Society Networking," in Mansell, R., and Raboy, M. (eds.), *The Handbook of Global Media and Communication Policy* (pp. 131-146). Oxford: Blackwell.

Cammaerts, B., and Carpentier, N. (2006) 'The Unbearable Lightness of Full Participation in a Global Context: WSIS and Civil Society Participation', in Servaes, J., and Carpentier, N. (eds.), *Towards a Sustainable Information Society: Deconstructing WSIS* (pp. 17-49). Bristol: Intellect.

Castells, M. (2009) Communication Power, Oxford: Oxford University Press

Castells, Manuel (2007) 'Communication, Power and Counter-power in the Network Society', *International Journal of Communication* 1: 238-66

Castoriadis, C. (1987) *The Imaginary Institution of Society: Creativity and Autonomy in the Social Historical World (trans. K. Blamey)*, Cambridge, MA: MIT Press.

Chakravartty, P., and Sarikakis, K., (2006) *Media Policy and Globalization*, Edinburgh: Edinburgh University Press.

Couldry, N. (2012) *Media, Society, World: Social Theory and Digital Media Practice,* Cambridge, UK: Polity Press.

Couldry, N. (2013) A Necessary Disenchantment: Myth, Agency and Injustice in a Digital Age, URL: http://www.lse.ac.uk/newsAndMedia/videoAndAudio/channels publicLecturesAndEvents/ player.aspx?id.2120 [Last consulted 01/06/2014]

Couldry, N. and Powell, A. (2014) 'Big Data From the Bottom Up', Big Data & Society, 1 (2).

Curran, J. (2012) 'Reinterpreting the Internet', in Curran, J., Fenton, N., and Freedman, D. (eds), *Misunderstanding the Internet* (pp. 3-33). London: Routledge.

Deibert, R. J. Palfrey, J. G., Rohozinski, R., and Zittrain, J. (eds) (2008) *Access denied: The Shaping of Power, Rights, and Rule in Cyberspace,* Cambridge, MA : MIT Press.

DeNardis, L. (2009) *Protocol Politics: The Globalization of Internet Governance,* Cambridge, MA: MIT Press.

DeNardis, L. (2012) 'Hidden Levers of Internet Control, *Information, Communication and Society* 15(5): 720-738,

DeNardis, L. (2013) 'The Emerging Field of Internet Governance', in Dutton, W. (ed.) *Oxford Handbook of Internet Studies* (pp. 669-691). Oxford: Oxford University Press.[e-book version]

DeNardis, L. (2014) *The Global War for Internet Governance,* New Haven: Yale University Press.

Downing, L. (2008). *The Cambridge Introduction to Michel Foucault,* Cambridge, UK: Cambridge University Press.

Eagleton, T. (1991) Ideology: An introduction, London: Verso.

Emke, I. (1994) 'Restricting Abusive Representation: A Case Study in Public Consultation Under the Charter', *Canadian Journal of Communication* 19 (2).

Escobar, A. (1995) *Encountering Development: The Making and Unmaking of the Third World,* Princeton, NJ: Princeton University Press.

Ermert, M. (2014) Desperate Final Stretch for the 'Marco Civil do Brasil', URL: http://www.ipwatch.org/2013/11/14/desperate-final-stretch-for-the-marco-civil-do-brasil/ [Last consulted 29/08/2014]

Fairclough, N. (2001) Language and power, Harlow: Longman.

Feenberg, A. (1999) *Questioning Technology*, New York: Routledge.

Feenberg, A. (2010) Between reason and experience, Cambridge, MA.: MIT Press.

Feenberg, A. (2011) 'Introduction', in Feenberg, A., and Friesen, N. (eds.), *(Re)Inventing the Internet* (pp. 3-18). Rotterdam: Sense Publishes.

Flichy, P. (2007) *The Internet Imaginaire (trans. L. Carey-Libbrecht)*, Cambridge, MA: MIT Press.

Flick, U. (2009) An Introduction to Qualitative Research, London: Sage.

Foucault, M. (1990) *The Will to Knowledge, The History of Sexuality 1 , (trans. Robert Hurley),* Harmondsworth: Penguin.

Freedman, D. (2008) *The Politics of Media Policy*, Cambridge: Polity Press.

Freedman, D. (2012) 'Web 2.0 and the death of the blockbuster economy', in Curran, J.,

Fenton, N., and Freedman, D. (eds), *Misunderstanding the Internet* (pp. 69-94). London: Routledge.

Gaonkar, D. P. (2002). "Toward New Imaginaries: An Introduction". Public Culture , 14(1): 1–19.

Gaonkar, D. P. (2000) 'On Alternative Modernities', in Gaonkar, D.P. (ed.), *Alternative Modernities* (pp. 1-23). Durham, NC: Duke University.

George, A. L. (1959) 'Quantitative and qualitative approaches to content analysis' , in de Sola Pool, I. (ed.), *Trends in content analysis*. Urbana: University of Illinois Press.

Gillespie, T. (2014) 'The Relevance of Algorithms', in Gillespie, T., Boczkowski, P., and Foot, K., Media (eds), *Technologies: Essays on Communication, Materiality, and Society* (pp. 175-202): Cambridge, MA: MIT Press.[e-book version]

Goldsmith, J. (1998), 'Against Cyberanarchy', Chicago Law Review 65:1199.

Goldsmith, J., and Wu, T. (2006) *Who Controls the Internet? Illusions of a Borderless World,* New York: Oxford University Press.

Greenwald, G. (2014), *No Place to Hide: Edward Snowden, the NSA, and the U.S. Surveillance State,* London: Macmillan.

Groeben, N. and Rustemeyer, R. (1994) 'On the integration of quantitative and qualitative methodological paradigms (based on the example of content analysis)', In Borg, I. and

Mohler, P. (eds.), *Trends and perspectives in empirical social research*. Berlin: De Gruyter.

Hamelink, C. J., and Nordenstreng, K. (2007) 'Towards democratic media governance', in E.

De Bens (ed.), Media Between Culture and Commerce (225-240). Bristol: Intellect.

Hansen, A., Cottle, S., Negrine, R. and Newbold, C. (1998). "Content Analysis", in Hansen, A.,

Cottle, S.,Negrine, R., and Newbold, C. (eds.), *Mass Communication Research Methods* (pp. 91-129). New York: New York University Press.

Hargreaves , I. (2011), *Digital Opportunity: A Review of Intellectual Property and Growth , Independent report commissioned by UK Prime Minister,* London: HMSO.

Haugaard, M. (2002) Power: A Reader, Manchester: Manchester University Press.

Holston, J. (2009) *Insurgent Citizenship: Disjunctions of Democracy and Modernity in Brazil.* Princeton, NJ: Princeton University Press.

Jenkins, H. (2004) 'The Cultural Logic of Media Convergence', *International Journal of Cultural Studies* 7(1): 33-43.

Jenkins , H. (2006) *Convergence Culture: Where Old and New Media Collide*, New York : New York University Press.

Johnson, D.R. and Post, D.G. (1996) 'Law and Borders – The Rise of Law in Cyberspace', *Stanford Law Review* 48:1367.

Jørgensen, R. F. (2013) 'An Internet Bill of Rights?', in Brown, I. (ed.), *Research Handbook* of Governance of the Internet. Cheltenham: Edward Elgar.

Kelty, C. (2005), 'Geeks, Social Imaginaries, and Recursive Publics', *Cultural Anthropology* 20(2): 185–214

Knight, P.T. (2014) *The Internet in Brazil: Origins, Strategy, Development, and Governance,* AuthorBook. [ebook version]

Kracauer, S. (1952) 'The challenge of qualitative content analysis', *Public Opinion Quarterly* 16: 631-642.

Krippendorff , K. (2004) *Content Analysis: An Introduction to Its Methodology*, Thousand Oaks, CA: Sage.

Krips, H (1990), 'Power and Resistance', Philosophy of the Social Sciences 20(2): 170-82

Kummer, M. (2007) 'The debate on Internet governance: From Geneva to Tunis and Beyond', *Information Polity* 12: 5–13

Laclau, E. (1990) New Reflections on the Revolution of Our Time, London: Verso.

Lash, S. (2007) 'Power after Hegemony: Cultural Studies in Mutation?', *Theory, Culture & Society* 24(3): 55–78.

Lampedusa, T. (1958) and *The Leopard* (trans. Archibald Colquhuon), New York: Pantheon.

Lanier, J. (2012) You Are Not a Gadget : A Manifesto, New York: Alfred A. Knopf.

Lasswell, H. D., Lerner, D.l, and de Sola Pool, I. (1952) *The comparative study of symbols: An introduction,* Stanford: Stanford University Press

Latzer, M. (2009) 'Convergence revisited: Toward a modified pattern of communications governance convergence', *The International Journal of Research into New Media Technologies* 15(4) : 411–426.

Lemos, R. (2014). "Enter Brazil: Net Mundial and the Effort to Rethink Internet Governance", in Biddle, E.R., Lemos, R., and Price, M. (eds), Stakes Are High: Essays on Brazil and the Future of Global Internet, URL: http://www.itsrio.org/en/projects/%EF%BF %BCstakes-are-high/ [Last consulted 29/08/2014]

Lessig, L. (1999) Code and Other Laws of Cyberspace, New York: Basic Books.

Lessig, L. (2006) Code V2, New York: Basic Books.

Lukes, S. (1974/2005) Power: A Radical View (2nd edn), London: Macmillan.

Mann, D. (2014), Marco Civil: Statement of Support from Sir. Tim Berners-Lee, URL: https://webfoundation.org/2014/03/marco-civil-statement-of-support-from-sir-timberners-lee/ [Last consulted 29/08/2014]

Manyozo, L. (2011). "Rethinking communication for development policy: some considerations" in Mansell, R. and Raboy, M. (eds.), The Handbook of Global Media and Communication Policy . Oxford: Blackwell.

Mayer- Schönberger, V. (2008) 'Demystifying Lessig', Wisconsin Law Review 4: 714-746.

MacBride, S. (Chairman). (1980) Many Voices One World, London: Kogan Page Ltd.

McQuail, D. (2007) 'Introduction: The current state of media governance in Europe', in Terzis, G, (ed.), *European media governance: National and regional dimensions* (pp. 17-25). Bristol: Intellect.

Malcolm, J. (2008). Multi-Stakeholder Governance and the Internet Governance Forum . Wembley: Terminus Press.

Mansell, R. (2010), 'The life and times of the Information Society', *Prometheus: Critical Studies in Innovation*, 28(2): 165-186

Mansell, R. (2012) *Imagining the Internet: Communication, Innovation, and Governance,* Oxford: Oxford University Press.

Mansell, R. (2013) 'Technological innovation, paradox and ICTs: Challenges for governing institutions, in Verhulst, S.G., Monroe, E.P., and Morgan, L. (eds), *Routledge Handbook of Media Law* (pp. 501-522). London: Routledge.

Mansell, R., and Nordenstreng, K. (2006) 'Great media and communications debates: WSIS and the MacBride report', *Information Technologies and International Development* 3(4): 15-36.

Mansell and Raboy, (2011) 'Introduction: Foundations of the Theory and Practice of Global Media and Communication Policy', in Mansell, R., and Raboy, M. (eds), *The Handbook of*

Global Media and Communication Policy (pp. 1-20). Oxford: Blackwell.

Mayring, P. (1983) *Qualitative Inhaltsanalyse. Grundlagen und Techniken (7th edn 1997),* Weinheim: Deutscher StudienVerlag.

Mayring, P. (2000), 'Qualitative Content Analysis', Forum: Qualitative Social Research, 1(2).

Marsden, C.T. (2010) *Net Neutrality: Towards a Co-Regulatory Solution*, New York: Bloomsbury USA.

Marvin, C. (1988) *When Old Technologies Were New: Thinking About Electric Communication in the Late Nineteenth Century*, Oxford: Oxford University Press

Mathiason, J. (2009) *Internet Governance: The New Frontiers of Global Institutions,* London: Routledge.

Mejias, U. (2013) *Off the Network: Disrupting the Digital World,* Minneapolis, MN: Minnesota University Press.

Mosco, V. (2004) *The digital sublime: Myth, power, and cyberspace,* Cambridge: The MIT Press.

Morozov, E. (2011), *The Net Delusion* London: Allen Lane.

Morriss, P. (2002) *Power: A Philosophical Analysis (2nd edn)*, Manchester: Manchester University Press;

Mueller, M. (2002) *Ruling the Root: Internet Governance and the Taming of Cyberspace*, Cambridge, MA: MIT Press.

Mueller, M. (2010) *Networks and States: The Global Politics of Internet Governance*, Cambridge, MA: MIT Press.

Mueller, M. (2014), Do the NSA Revelations Have Anything do to with Internet Governance?, *Internet Governance Project*, 19 February, URL: http://www.Internetgovernance.org/2014/02/19/do-the-nsa-revelations-have-anything-to-do-with-Internet-governance/ [Last consulted 29/08/2014]

Mueller, M., Mathiason, J., and Klein, H. K. (2007). "The Internet and Global Governance: Principles and Norms for a New Regime". Global Governance , 13(2): 237–54.

Mueller, M. and Wagner, B. (2014), Finding a Formula for Brazil: Representation and Legitimacy in Internet governance", *Internet Governance Project*, URL: http:// www.Internetgovernance.org/wordpress/wp-content/uploads/ MiltonBenWPdraft_Final_clean2.pdf [Last consulted 29/08/2014]

Murray, A. (2007) *The Regulation of Cyberspace: Control in the Online Environment,* London: Routledge.

Murray, A. (2011), 'Nodes and Gravity in Virtual Space', *Legisprudence* 5: 195.

Naughton, J. (2000) *A Brief History of the Future: The origins of the Internet,* London: Phoenix.

Negroponte, N. (1995) Being Digital, New York: Vintage Books.

NetMundial (2014) Internet Governance Principles, URL: http://document.netmundial.br/1-Internet-governance-principles/ [Last Consulted 29/08/2014]

Neuendorff, K. A. (2002), *The Content Analysis Guidebook*, Thousand Oaks, CA: Sage.

Nolasco, J. (2014) Building the Marco Civil: A Brief Revandiew of Brazil's Internet Regulation History, in E.R. Biddle, R. Lemos, and M. Price, M. (eds), Stakes Are High: Essays on Brazil and the Future of Global Internet, URL: http://www.itsrio.org/en/projects/ %EF%BF%BCstakes-are-high/ [Last consulted 29/08/2014]

Nolasco, J. (2014). Acessando a Rede: Um Olhar Sobre a Formação da Agenda para a Regulação da Internet (unpublished master's thesis). Fundação Getúlio Vargas, São Paulo, Brazil.

Nordenstreng, K. (2011) 'Free Flow Doctrine in Global Media Policy' in Mansell, R. and Raboy, M.(eds) *The Handbook on Global Media and Communication Policy* (pp. 79-94) Oxford: Blackwell.

National Telecommunications and Information Administration (NTIA) (2014) NTIA Announces Intent to Transition Key Internet Domain Name Functions, URL: http:// www.ntia.doc.gov/press-release/2014/ntia-announces-intent-transition-key-Internetdomainname-functions [Last consulted 20/08/2014]

name-functions [Last consulted 29/08/2014]

Padovani, C., and Tuzzi, A. (2004) 'The WSIS as a world of words: Building a common vision of the information society', *Continuum: Journal of Media & Cultural Studies* 18(3): 360–379.

Powell, A. (2008) 'WiFi publics: producing community and technology', *Information, Communication & Society* 11(8): 1068-1088.

Puppis, M. (2010) 'Media governance: a new concept for the analysis of media policy and regulation', *Communication, Culture & Critique* 3(2): 134–49.

Reed, C. (2004) *Internet Law: Text and Materials*, Cambridge, UK: Cambridge University Press.

Reidenberg, J.R. (1998) 'Lex Informatica: The Formulation of Information Policy Rules through Technology', *Texas Law Review* 76: 553–93.

Rheingold, H. (2000) The Virtual Community (rev. ed.), Cambridge, MA: MIT Press.

Trabsky, M., Thomas, J., and Richardson, M. (2013) 'The faulty door of cyberspace and implications for privacy law', *Law in Context* 29(1): 13-25.

Rousseff , D. (2013) Statement by H. E. Dilma Rousseff , President of the Federative Republic of Brazil, at the Opening of the General Debate of the 68th Session of the United Nations General Assembly, URL: http://gadebate.un.org/sites/default/files/gastatements/68/BR_en.pdf [Last consulted 29/08/2014]

Schulz, W. (2014) Collaborative Lawmaking as a Knowledge Problem, in Biddle, E.R., Lemos, R., and Price, M. (eds), Stakes Are High: Essays on Brazil and the Future of Global Internet, URL: http://www.itsrio.org/en/projects/%EF%BF%BCstakes-are-high/ [Last consulted 29/08/2014]

MSc Dissertation of João Carlos Magalhães

Schreier, M. (2012) *Qualitative Content Analysis in Practice*, London: Sage.[e-book version]

Silverstone, R. (2005) 'The Sociology of Mediation and Communication'in Calhoun, C.,

Rojek, C., Turner, B. (eds) *The SAGE Handbook of Sociology* (pp. 188-207). London: Sage Publications.

Silverstone, R. (2007) *Media and Morality: On the Rise of the Mediapolis,* Cambridge: Polity Press.

Shirky, C. (2008) *Here Comes Everybody: the Power of Organizations without Organization,* London: Allen Lane.

Solum, L. B. (2009) 'Models of Internet Governance', in Bygrave, L.A., and Bing, J. (eds), *Internet Governance: Infrastructures and Institutions* (pp. 48-91). Oxford: Oxford University Press.

Souter, D. (2007), Whose Information Society? Developing Country and Civil Society Voices in the World Summit on the Information Society, URL: http://www.apc.org/en/systemfiles/whose_summit_EN.pdf [Last consulted 29/08/2014]

Star, S. L. (1991) 'Power, Technologies and the Phenomenology of Conventions: on Being Allergic to Onions', in Law, J. (ed.) *A Sociology of Monsters? Essays on Power, Technology and Domination (26-56).* London: Routledge.

Stein, L. (2004) 'Understanding speech rights: Defensive and empowering approaches to the First Amendment', *Media Culture and Society*, 26(1): 103–120.

Strauss, C. (2006) 'The Imaginary', Anthropological Theory, 6: 322.

Strum, S. and Latour, B. (1987) 'The meanings of social: from baboons to humans', *Information sur les Sciences Sociales/Social Science Information*, 26: 783-802.

Tambini , D., Leonardi, D. and Marsden, C. (2007) *Codifying Cyberspace: Self Regulation of Converging Media*, London: Routledge.

Taylor, C. (2002) 'Modern Social Imaginaries', *Public Culture* 14(1): 91–124.

Taylor, C. (2004) *Modern Social Imaginaries,* Durham, NC: Duke University Press. [ebookversion]

Taylor, C. (2007) A Secular Age, Cambridge, MA: Belknap Press. [ebook-version]

The Economist (2014) An Online Risorgimento, *Babbage*, 26 April 2014, URL: http:// www.economist.com/blogs/babbage/2014/04/Internet-governance [Last consulted 29/08/2014]

Thompson, J. (1982) 'Ideology and the Social Imaginary: An Appraisal of Castoriadis and Lefort', *Theory and Society* 11(5): 659–681.

Thompson, M. (2012) 'Marco civil ou demarcação de direitos? Democracia, Razoabilidade e as Fendas na Internet do Brasil', *Revista de Direito Administrativo* 261: 203-251.

Turner, F. (2006) *From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network, and The Rise of Digital Utopianism,* Chicago: The University of Chicago Press

van Dijck, Jose (2013) *The Culture of Connectivity: A Critical History of Social Media*, Oxford University Press: Oxford

van Eeten, M.J.G, and Mueller, M. (2013) 'Where is the governance in Internet governance?', *New Media & Society* 15(5): 720–736

Weber, R.P. (1990) Basic Content Analysis, London: Sage.

Winner, L. (1986) The Whale and the Reactor, Chicago: University of Chicago.

Wilson, E,J (2004) *Information Revolution and Developing Countries*, Cambridge, MA: MIT Press.

World Bank (2013), Internet users (per 100 people), URL: http://data.worldbank.org/ indicator/IT.NET.USER.P2 [Last consulted 29/08/2014]

Working Group on Internet Governance (WGIG). (2005) *Report of the Working Group on Internet Governance,* Château de Bossey: WGIG.

World Summit on the Information Society (WSIS) (2005) *Tunis Agenda for the Information Society*, Tunis: WSIS.

Yar. M. (2012) 'Virtual Utopias and Dystopias: The Cultural Imaginary of the Internet', in Tester, K. and Hviid-Jacobsen, m. (eds) *Utopia: Social Theory and the Future* (179-195). Aldershot: Ashgate.

Ziewitz, M. and Brown, I. (2013), 'A Prehistory of Internet Governance', in Brown, I. (ed), *Research Handbook on Governance of the Internet* (3-26). Cheltenham, UK: Edward Elgar.

Zittrain, J. (2006) 'The Generative Internet', Harvard Law Review 119: 1974 –2040 .

Zittrain, J. (2008) *The Future of the Internet and How to Stop It*, New Haven and London: Yale University Press.

Zittrain, J. (2014) No, Barack Obama is not Handing Control of the Internet over to China, URL:http://www.newrepublic.com/article/117093/us-withdraws-icann-why-its-no-big-deal [Last consulted 29/08/2014]

APPENDIX A - CODE BOOK

Category linked to dominant-liberal imaginary Category linked to alternative-reformist imaginary Category linked to critical imaginary

Dimension 1 - Text Factual Data (dismissed)

Date of text (same of the post, copy/paste)

Name/nickname of the contributor (same of the post, copy paste)

Length of the text (use a word-counter software)

(1) small - less then 100 words

- (2) medium between 100 and 500 words
- (3) large more than 500 words

Dimension 2 - Who Imagined What

The Who (dismissed)

Which kind of stakeholder the contributor is? (according to the self-description of the post)

- (1) government actor
- (2) private company actor
- (3) civil society actor
- (4) 'regular' citizen
- (5) academic / technical community
- (6) Impossible to discern

The What

What is the main topic discussed in the text? (based on Denardis, 2013 and pilots)

(1) Freedom of expression and information-related rights

- (2) Privacy-related rights, including identification and location
- (3) Intellectual property-related rights (copyrights/left, patent etc)
- (4) Management of Internet critical resources (websites names, IPs etc)
- (5) Security (viruses, worms, password etc)
- (6) Internet physical structure (networks, pipes etc)
- (7) Internet protocols (TCP/IP suit etc)
- (8) The bill/governance itself (comments/critiques etc)
- (9) Consumers rights (relation consumer-companies)

Dimension 3 - The Role of States Before Communities and Markets

A - Should states legislate on Internet governance matters? (according to the terms established in the conceptual framework)

- (1) No, states should not legislate about the Internet states, no qualifications
- (2) Yes, states should legislate about any Internet matters, no qualifications

- (3) Yes, states should legislate about the Internet, but only to guarantee community sovereignty
- (4) States should legislate about the Internet, but only to guarantee market well-functioning

(5) Issue not present in the text

B - Can the system's complexity be controlled? (according to the terms established in the conceptual framework)

- (1) No, too complex to be controlled
- (2) Yes, can be controlled by Internet community
- (3) Yes, can be controlled by public policies
- (4) Issue not present in the text

C - Who should lead Internet governances processes? (according to the terms established in the conceptual framework)

- (1) No-one in specific, community governs itself
- (2) Companies/private actors should lead
- (3) States should lead
- (4) Issue not present in the text

D - What investments in Internet-related matters should prioritize? (according to the terms established in the conceptual framework)

(1) - increase the capacity of the system through software and hardware

- (2) expand points of access
- (3) expand publicness of the Internet
- (4) in-depth, critical educational initiatives
- (5) Issue not present in the text

Dimension 4 - Management of the information Flow

A - Should Internet Property Rights (IPRs) be enforced? (according to the terms established in the conceptual framework)

- (1) Yes, no matter what
- (2) No, no matter what
- (3) Yes and no, case-by-case definition
- (4) Issue no present in the text

B - In general terms, should the information flow of the Internet be somehow limited? (according to the terms established in the conceptual framework)

- (1) Yes, information flow must be constrained by certain values, such as private property, no matter what
- (2) No, information must be free, no matter what
- (3) Yes and no, case-by-case definition

(4) Issue not present in the text

Dimension 5 - Power and Internet Governance

A - How stakeholder's interests nature are depicted in this text? (according to the terms established in the conceptual framework)

(1) Mainly Subjective, consensus driven

(2) Mainly subjective and objective, consensus among stakeholders are not enough

(3) Issue not present in

the text

B - How the system's neutrality (bias) is depicted in this text? (according to the terms established in the conceptual framework)

(1) As a neutral system, i.e. the Internet does not affect power relationships

(2) As neutral system that can be distorted and thus affect power relationships

(3) The system is never neutral, thus always affect power relationships

(4) Issue not present in the text

C - Should states intervene in power relations? (according to the terms established in the conceptual framework)

- (1) No, a free market can deal with them
- (2) No, community can deal with them
- (3) Yes, states should intervene
- (4) Issue not present in the text
- D Are conflicts of interests mentioned in the text?
- (1) Yes
- (2) No

E - Which are the actors of the eventual conflict of interest?

- (1) Individuals x states
- (2) Individuals x companies
- (3) Individuals x individuals
- (4) Companies x states
- (5) Companies x companies
- (6) States x states
- (7) Unclear
- (8) Issue not present in the text

F - Which actor is characterized by this text as oppressed?

- (1) Regular users
- (2) Companies
- (3) State
- (4) Unclear
- (5) Issue not present in the text
- G Which actor is characterized as oppressor?

- (1) Regular users
- (2) Companies
- (3) State
- (4) Unclear
- (5) Issue not present in the text

H - How conflicts of interests nature are depicted in this text? (according to the terms established in the conceptual framework)

(1) Observable, only overt

(2) Observable, overt and covert

(3) Not only observable: overt, covert and latent

(4) Issue not present in the text

APPENDIX B - EXAMPLE OF REDUCTION AND PARAPHRASING

Raw text

'This draft is not mature enough. I think we should discuss it more. Leave the Civil Marco to be ratified by next government. As it is, it vindicates the Internet providers and criminalize community moderators. And what about the free access for low-income people, who will pay for it? The middle class, again? Identifying users does not guarantee anything, this is already done. Transparency by the government should be a moral obligation. The Internet needs to remain free from the big media companies. The old media and ideological persecutions do not have the power to silence or intimidate network users who want to express themselves freely and make themselves heard through it. Providers should also have defined obligations, such as returning the user his or her data stored in the end of the contract, regardless of the reason, including insolvency; they also must dispose of a BDS (backup domain server) to ensure that sites are always available and servers of electronic mail continue operating even when the primary server is down for maintenance; they should alert the user before stopping the service, either by reason of default or inappropriate content; maintain 24 hours/day call centers and provide attendance protocol numbers. It is also important to provision a penalty for the violation of privacy when a user is tracked or tapped without prior court order or express written permission from the user. The Internet is sacred! It is the first time in history that any user can have the same voice, or sometimes even a greater voice, than the old media. People should be able to express their opinions and thoughts without fear of reprisals for being tracked by the same corporations that they may, legitimately, criticize. And the spam? No-one have thought to prohibit the sending of unsolicited e-mail? And the obligation of the sites with adult content to check user age? Brazilian digital community should realize this is not the best moment to make this [draft] a bill. We have to discuss it for at least 12 months [more]; the draft of the bill should be drafted with the presence of representatives of the OAB (National Lawyers Organization) and civil society sectors, more broadly, not just here, online. In any case I left some comments, because I cannot see this without making my contribution, as I have been online since 1995. During these 15 years, I have never seen a digital Internet criminal escape the police and the Civil Marco never existed. Thus, what is the real purpose of this bill, that talks so much about tracking, and storing access logs when this is already happening and that is how the authorities arrive to criminals who steal bank accounts and clone cards... Is there anything new here?.'

Edited text

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This draft is not mature enough. I think we should discuss it more. During these 15 years, I have never seen a digital Internet criminal escape the police and the Civil Marco never existed. Thus, what is the real purpose of this bill, that talks so much about tracking, and storing access logs when this is already happening and that is how the authorities arrive to criminals who steal bank accounts and clone cards... Is there anything new here? And what about the free access for low-income people, who will pay for it? The middle class, again? Identifying users does not guarantee anything, this is already done. Transparency by the government should be a moral obligation. The Internet is sacred! It is the first time in history that any user can have the same voice, or sometimes even a greater voice, than the old media. People should be able to express their opinions and thoughts without fear of tracked by the same corporations that they may, legitimately, criticize. t is also important to provision a penalty for the violation of privacy when a user is tracked or tapped without prior court order or express written permission from the user. The Internet needs to remain free from the big media companies. The old media and ideological persecutions do not have the power to silence or intimidate network users who want to express themselves freely and make themselves heard through it. Providers should also have defined obligations, such as returning the user his or her data stored in the end of the contract, regardless of the reason, including insolvency; they also must dispose of a BDS (backup domain server) to ensure that sites are always available and servers of electronic mail continue operating even when the primary server is down for maintenance; they should alert the user before stopping the service, either by reason of default or inappropriate content; maintain 24 hours/day call centers and provide attendance protocol numbers. And the spam? No-one have thought to prohibit the sending of unsolicited e-mail? And the obligation of the sites with adult content to check user age?

Units

TOPICS

-This draft is not mature enough. I think we should discuss it more.

-And what about the free access for low-income people, who will pay for it? Transparency by the government should be a moral obligation.

-People should be able to express their opinions and thoughts without fear of being tracked by the same corporations that they may, legitimately, criticize.

-Providers should also have defined obligations

-And the spam? No-one have thought to prohibit the sending of unsolicited e-mail?

FREEDOM OF EXPRESSION

People should be able to express their opinions and thoughts without fear

PRIVACY

without fear of being tracked by the same corporations that they may, legitimately, criticize

USER IDENTIFICATION

without fear of being tracked by the same corporations that they may, legitimately, criticize

NET NEUTRALITY

-

INTERNET LEGISLATION This draft is not mature enough. I think we should discuss it more. Internet is sacred!

CONTROL OF COMPLEXITY

And the spam? No-one have thought to prohibit the sending of unsolicited e-mail?

GOVERNANCE LEADER This draft is not mature enough. I think we should discuss it more. Internet is sacred!

INVESTMENTS And what about the free access for low-income people, who will pay for it? Transparency by the government should be a moral obligation.

IPRs ENFORCEMENT

-

INFORMATION FLOW The Internet needs to remain free

STAKEHOLDERS INTERESTS

t is also important to provision a penalty for the violation of privacy when a user is tracked or tapped without prior court order

SYSTEM'S BIAS And the spam? No-one have thought to prohibit the sending of unsolicited e-mail?

STATE INTERVENTION

And the spam? No-one have thought to prohibit the sending of unsolicited e-mail?

CONFLICT OF INTERESTS (MENTION)

People should be able to express their opinions and thoughts without fear of being tracked by the same corporations that they may, legitimately, criticize.

CONFLICT OF INTERESTS (CONFLICTUAL PAIRS)

People should be able to express their opinions and thoughts without fear of being tracked by the same corporations that they may, legitimately, criticize.

CONFLICT OF INTERESTS (ACTOR OPPRESSED)

People should be able to express their opinions and thoughts without fear of being tracked by the same corporations that they may, legitimately, criticize.

CONFLICT OF INTERESTS ACTOR OPPRESSOR)

People should be able to express their opinions and thoughts without fear of being tracked by the same corporations that they may, legitimately, criticize.

CONFLICT OF INTERESTS NATURE

The old media and ideological persecutions do not have the power to silence or intimidate network users who want to express themselves freely and make themselves heard through it

Narratives

TOPICS

-Internet governance and this law require a long debate

-Internet governance should discuss free Internet access to all

-Internet governance should protect the privacy

-Internet governance should protect freedom of expression

-Internet governance must impose conditions on suppliers of Internet services

-Internet governance services should discuss the prohibition of spam e-mail

FREEDOM OF EXPRESSION

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-Internet governance should protect freedom of expression

PRIVACY Internet governance should protect privacy

USER IDENTIFICATION Internet governance should protect privacy, and not identify users

NET NEUTRALITY

Internet LEGISLATION Governments should legislate on Internet governance, but respecting community sovereignty

CONTROL OF COMPLEXITY The example of spam e-mail demonstrates that the Internet can be controlled by public policies

GOVERNANCE LEADER The Internet is sacred and must be commanded in your community

INVESTMENTS -Internet governance must seek free access to all -Internet governance-a must make all governmental information public

IPRs ENFORCEMENT

INFORMATION FLOW Governance of the Internet must preserve the free flow of information

STAKEHOLDERS INTERESTS States must intervene in subjective arrangements between stakeholders

SYSTEM'S BIAS Spam shows that the Internet, as a technology, can be distorted and impact relations of power (conflict of interests)

STATE INTERVENTION Governments should intervene in unequal power relations, as the necessity to prohibit spam demonstrates

CONFLICT OF INTERESTS (MENTION) Users and companies may have divergent interests in Internet governance

CONFLICT OF INTERESTS (CONFLICTUAL PAIRS) Users and companies may have divergent interests in Internet governance

CONFLICT OF INTERESTS (ACTOR OPPRESSED) Users and companies may have divergent interests in Internet governance

CONFLICT OF INTERESTS ACTOR OPPRESSOR) Users and companies may have divergent interests in Internet governance

CONFLICT OF INTERESTS NATURE

Conflict between users and companies users are visible, but they might affect freedom of expression, what would prevent some conflicts from entering the political arena

Coded Text

TOPICS -Freedom of expression -Privacy -Security (spam) -Infrastructure (increase the points of access) -The bill itself -Consumers' rights

FREEDOM OF EXPRESSION Yes

PRIVACY Yes

USER IDENTIFICATION No

NET NEUTRALITY Issue not present in the text

Internet LEGISLATION States should legislate on Internet issues, but only to empower community sovereignty

CONTROL OF COMPLEXITY Can be controlled through public policies

GOVERNANCE LEADER Community should lead

INVESTMENTS -Expand points of access -Expand publicness of the Internet

IPRs ENFORCEMENT Issue not present in the text

INFORMATION FLOW Information should run free

STAKEHOLDERS INTERESTS Mainly objective

SYSTEM'S BIAS Internet is neutral, but might be distorted by private interests

STATE INTERVENTION States should intervene

CONFLICT OF INTERESTS (MENTION)

Yes

CONFLICT OF INTERESTS (CONFLICTUAL PAIRS) User x companies

CONFLICT OF INTERESTS (ACTOR OPPRESSED) User

CONFLICT OF INTERESTS ACTOR OPPRESSOR) Companies

CONFLICT OF INTERESTS (NATURE) Observable, but overt and covert (2D)

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