Policies, Pipes, and Publics:

The Politics of Net Neutrality Discourse and the Regulation of Internet Infrastructures

by

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Table of Contents

Abstract	ii
Acknowledgements	iv
Introduction Net Neutrality as Emergent Media Policy Discourse	1
Chapter 1 Media Policy Discourse, Democratic Communications Infrastructure, and Emergent Media	38
Chapter 2 A History of 'Net Neutrality' Discourse, 2003-2013	105
Chapter 3 Terms of Power in Net Neutrality Policy	137
Chapter 4 Negotiating Net Neutrality in Open Internet Policymaking	189
Chapter 5 Net Neutrality and the FCC Open Internet Order of 2010	274
Chapter 6 Net Neutrality After the Open Internet Order	337
Conclusion Democratic Communications and the Future of Net Neutrality	366
Works Cited	395

POLICIES, PIPES, AND PUBLICS:
THE POLITICS OF NET NEUTRALITY DISCOURSE
AND THE REGULATION OF INTERNET INFRASTRUCTURES

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This dissertation is a critical cultural history of *net neutrality* (the standard that all users and uses of the internet should receive equal treatment from network operators) as a media policy discourse in the United States from 2003-2013. It considers net neutrality a keyword with implications for shaping emergent media policy and infrastructure and, therefore, participation in 21st century communications and culture. It analyzes the interacting dynamics of policy discourse, communications infrastructure, and the public sphere through a case study of the first US regulations based on net neutrality: the Federal Communications Commission's Open Internet Order of 2010. Through discursive analysis of the Open Internet regulations and the debates surrounding them, this dissertation explores the politics of media policy and the ways in which they afford and delimit what people are able to do with emergent media technologies. This work contributes to cultural theories of communications policy by shedding light on how discourse legitimizes and constructs media regulations, systems, and practices. It forwards a conceptual framework that accounts for the political economic structures, technological infrastructures, and cultural practices that constitute media when they are new, with particular

focus on the role of policy in enabling and constraining the possibilities of emergent media. The history traced here shows a struggle between public values and private interests in the political choices of media regulation, the power of policy to define the legal, industrial, and technical structures of emergent media systems, and the related social and cultural implications. The research here shows how net neutrality eroded in practice, leading to failed attempts to put the principle into policy. The phone and cable companies that own and operate the physical infrastructure used to access the internet worked to leverage their bottleneck position as the last mile of the network into gatekeeper control of what the network may be used to do, threatening to squeeze out the circulation of culture and communication from everyday users. The Open Internet policy enacted in response, though, fell short of net neutrality, this dissertation argues, as a result of imbalanced discursive power relations in the policy sphere.

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day. I hope that this project is some small contribution toward the better world that she helps me to envision and work for each day.

Introduction

Net Neutrality as Emergent Media Policy Discourse

As this dissertation is being written there is a battle going on over control of the means of communication in the 21st century. The internet has become a vital platform for wider and more equitable participation in the creation and circulation of information. Internet technologies have afforded increased communicative capacities for many people and supported expanded possibilities for cultural expression, political deliberation, social movements, identity formation, community building, technological innovation, and economic opportunity. However, the democratic potential of internet media depends on the shape of the technical infrastructure that lies underneath it— the internet is still emergent and we cannot take for granted what it will be in the future. The internet is not open and participatory by the inherent nature of its technologies, but because it was historically designed, developed, and managed in a manner consistent with principles of fairness and equality. The internet is a product of human choices, and the struggle is about choosing who and what the network is for: Should the internet be a public space for any user to participate in creating, connecting, and communicating on equal footing, or should the internet be a private delivery system for corporate products and services?

The debate over *network neutrality* is where this battle is taking place— where this choice over what the internet shall be will be made. Network neutrality is a principle of openness and nondiscrimination in connecting to the internet. This standard of equitable access informed the early development, management, and regulation of internet infrastructure— network neutrality is the norm that sustained the internet's existence as an open public resource. The principle of

network neutrality has eroded in practice, however, inspiring attempts to put the principle into policy.

The small number of large corporations that own and operate the physical infrastructure used to access the internet— in the United States, these network operators include cable companies like Comcast and Time Warner and phone companies like AT&T and Verizon— have begun interfering with what users of the internet choose to do. Since the transition to broadband internet access around the turn of the millennium, these network operators have been working to leverage their bottleneck position in the last mile of the network into gatekeeper control of what the network may be used to accomplish. This corporate control comes with consequences not just for what business model in the internet economy will prevail or what the possibilities for technological innovation will be— the perspective too much of the scholarly work considering net neutrality has taken— but for the survival of public values in communications and the promise of democratic media participation offered by the internet. Since 2005, to name just a handful of examples, network operators in North America have blocked users' access to peer-to-peer filesharing services, community forums, and voice and video telephony applications; throttled streaming video traffic; and censored pro-choice, antiwar, and labor organizing messages from nonprofit organizations, unions, and artists.[1] Increasingly, discrimination has become built into the functioning of broadband services by network operators: data caps that constrain traffic on the network unless a fee is paid, prioritization for operators' own services, pay-for-play arrangements that extract tolls to reach users, and, increasingly, private networks separate and unequal from "the public internet."[2] All of this threatens to squeeze out the circulation of culture and communication from everyday users. Net neutrality is an assurance for equitable participation that is essential for supporting public infrastructure for

communications and the democratic possibilities of the internet.

This fight over net neutrality has played front and center in the arena of communications policy for the better part of a decade, but that is not a venue that tends to inspire particularly wide attention. As the fundamental basis for the internet as a means of democratic communications began to be dismantled, a movement in the US arose beginning in the mid 2000s to enshrine net neutrality in internet infrastructure policy. As the primary regulator of communications infrastructures, the Federal Communications Commission (henceforth, FCC or the Commission) has been the primary location for the net neutrality battle. The FCC aided and abetted the dissolution of net neutrality in a series of decisions over how to regulate broadband internet access from 2002 to 2005, but nodded toward net neutrality principles in 2005.[3] After acknowledgment from the US Supreme Court in 2005 that the FCC had no effective policy protection for net neutrality, the push for net neutrality regulations began in earnest, which led to the FCC's Protecting the Open Internet proceeding.[4] This policymaking process began in 2009 under the leadership of Chairman Julius Genachowski, appointed by newly elected President Barack Obama, and culminated in the Open Internet Order of 2010— an ultimately short-lived set of rules that nonetheless represent the first meaningful net neutrality policy in the US.[5] This monumental political battle over public values on the internet, however, has been obscured as a matter of policy and pipes.

I show here how the net neutrality debate is about much more than bureaucracy and plumbing, though— it is about how people can use the internet and, therefore, the shape of the 21st century public sphere. Policy is, indeed, the site where these decisions ought to be made— public policy is the central means through which such crucial decisions about access to the means of communication and freedom of expression should be made. However, policy is too

often kept arcane and 'boring'— leading to an exclusion of everyday citizen participation in a process that favors the elites who enjoy ready access to the rarified discourse of policymaking. For as important as the struggle for net neutrality has been, it is unsurprising that it has remained mystifying to the average user of the internet: it has taken place primarily in reams of paper filled with legalese filed at government agencies, on its face about the management of cables, wires, routers, and servers.

The stakes in the net neutrality conflict are high, because it is part of a critical juncture in the emergence of the internet as an essential infrastructure for communications. Media history demonstrates that the constitutive choices made early in the history of still stabilizing media systems set a trajectory for development and use from which it is difficult to deviate. As a crucial site of decisions that define and shape the structures and practices of media, public policy will enable and constrain the possibilities of the internet. Policy has a unique power to set the terms on which people access the means of communication and, therefore, a distinct obligation to make such decisions by and for democratic public participation. The battle for net neutrality is fundamentally about sustaining public values over private interests— a fight for democracy in communications.

This dissertation is a critical cultural history of net neutrality in the United States from 2003-2013. It considers net neutrality as a discourse and a policy issue with implications for shaping emergent media infrastructure and, therefore, participation in 21st century communications and culture. The objectives of this project are threefold. First, it records the history of a consequential moment in the development of digital media, not just to document the events surrounding the net neutrality debate during this period, but also to make visible and explain the related contours and dynamics of policymaking and emergent media infrastructure

that are too regularly erased from view and left impenetrable as they occur. Second, it contributes to cultural theories of communications policy, by advancing an analysis of net neutrality principles and policy that can help shed light on how discourse legitimizes and constructs media regulations, systems, and practices. Third, it initiates a conceptual framework for making sense of the emergence of media systems that accounts for the political economic structures, technological infrastructures, and cultural practices that constitute media, in particular developing an understanding of the role of policy in enabling and constraining the possibilities of media when they are new. Ultimately, this project seeks to create knowledge in these areas in the service of an end goal of social justice— this work is done in support of the public values of fairness, equality, and democratic participation in communications that net neutrality represents.

The particular focal point for my analysis is the FCC's Open Internet Order of 2010. The Open Internet regulations are as close as the US has come to meaningful net neutrality policy and were a consequential part of a turning point in the transition to next-generation digital networks. Beyond documenting a history of this landmark media policy, I approach the Open Internet rules as a case study of the interacting dynamics of policy discourse, communications infrastructure, and the public sphere. I follow the Open Internet rules through the policymaking process, capturing the entire short but significant life of the policy, beginning with precedents and conceptions from 2003 to 2009, then to the policy's proposal, negotiation, adoption, and enactment from 2009 to 2011, up to its implementation and eventual elimination in the first weeks of 2014. Focusing on one particular set of regulations as a case study allows me to develop a full picture of the policy at issue through an integrated approach based on the classic circuit model of media and cultural studies elaborated by Julie D'Acci (1992, 1994). I investigate the Open Internet rules at the four sites of cultural analysis that D'Acci describes: the "social-

historical context" in which it operated (Chapters 1 and 2), the "text" of the policy (Chapters 3 and 5), the "production" of the policy (Chapter 4), and the "reception" of the policy in practice (Chapter 6). As an object of study, the Open Internet regulations also provide a useful point of entry through which to explore the politics of media policy and the ways in which they afford and delimit what people are able to do with emerging media technologies. The internet is still taking shape as a media system and regulatory decisions such as the FCC's Open Internet policy have an important influence over the shape of next-generation wired and wireless broadband technologies to connect to the network— thereby, setting the terms for access and participation online in the future. The case of Open Internet policy at the FCC shows how a struggle between public values and private interests has played out in the political choices of media regulation, how policy exercises the power to define the legal, industrial, and technical structures of emergent media systems, and the social and cultural implications that result from this process.

My evidence for this analysis comes primarily from documentary research. I draw from materials in policy proceedings, corporate records, technical literature, advocacy work, and trade press coverage, supplemented with oral history and observations from participants. These materials include: FCC reports, orders, briefs, hearings, testimony, comments, and filings; congressional legislation, judicial rulings, case law, and legal briefs; articles and papers in technical, legal, and economic journals, books, and conference literature in telecommunications and networking fields; news media, trade presses, and blogs reporting on policymaking and the technology and media industries; corporate memos, financial records, and service information; statements from policymakers, representatives from corporations and interest groups, advocates, and technical specialists; and commentary and popular discussions on websites, blogs, online forums, and social media platforms.[6] While the traditional venues of policymaking remain the

center of my analysis, I do follow the discourse of net neutrality beyond official policy proceedings to look at popular interventions outside of recognized means and how the policy actually plays out in practice, in recognition of how boundaries of the policy sphere have been put into question by media policy scholarship led by Thomas Streeter (2013), Bill Kirkpatrick (2013), and others (e.g., Gangadharan 2013; Mochnacki 2013).

My research in this project relies primarily on historiographical methods of gathering evidence. Archival methodology is a necessary mode of collecting and assembling all of these materials. Rather than seeking and uncovering these artifacts in a traditional physical archive, however, both the contemporaneous and internet-focused nature of my research necessitates an emerging methodology of digital archiving. That is, because so many of the sources with which I am working— from popular blog comments to filed policy comments— were so recently in use and either digitized or born-digital, I have had to assemble and organize my own archive from what is made available online. While in certain ways this digital archiving process makes such documentary work more convenient from a geographic accessibility and searchability standpoint, it brings with it new ways in which gaps and silences in the historical record can be introduced. As Megan Sapnar Ankerson reminds us, the status and availability of online materials is always tenuous and at the mercy of uploads, downloads, and removals (2012). For this and many other reasons, my research remains grounded in a historiographical orientation championed by Michele Hilmes (e.g., 2008) that pays particular attention to how the uneven preservation and accessibility of archival documents influences the writing of history and the operations of power in the way stories of the past are told. This dissertation research is a work of historiography even if it is writing a very recent history— as Hilmes usefully emphasizes, no matter how contemporary the events under study are, they can only ever be encountered after they have

passed.

In this research, I apply techniques of discursive textual analysis for investigating this material. As discussed below, the policy analysis undertaken here takes some cues from traditional legal studies and political science but is based more so in critical approaches to policy from cultural and political economic perspectives. My research, then, is interpretive in nature, rather than empirical in the positivist sense typical of most policy studies. I undertake close readings and textual analyses of the documents I examine, with an eye for the power relations embedded in the discourses surrounding the policy under study and the work they do in discursive construction of the technologies and practices of interest here. As laid out by Streeter, the techniques of discourse analysis of policy involve: identifying specific patterns in language use over time; undertaking close readings of these patterns and their meanings, interrelations, and underlying assumptions; and tracing connections between discursive formations, policy actions, and relations of power (2013). I employ the methods of discourse analysis in this research to the discursive formation of 'net neutrality' in order to sketch an intellectual genealogy of the principle, to understand its articulation to various political, economic, and technical discourses, and to assess the work it performs in influencing policy decisions and relations of power.

I should also mention here that the scope of this study is consciously bounded in terms of time, geography, and topic— this is not the whole history of the network neutrality principle nor of how it has played into policy and practice. Rather, I have narrowed my focus in a number of ways in order to make for a manageable project. These choices warrant some explanation of the logic behind them. While it draws on historical precedents throughout the 20th century and sketches a bit of prehistory dating back to the 1960s, the research presented here concentrates on

the ten year period between the moment when the phrase ‘network neutrality’ first appeared in print (2003, in a legal journal article by Tim Wu) until the last month that net neutrality regulations stood in the US (December 2013, before the Open Internet rules were struck down by a federal appeals court in January 2014). I cover a relatively short period of time because it allows for the development of more depth and detail in analysis, which is important given the consequential developments that took place during that time. This is a very recent history and writing contemporaneously to many of the events (especially from 2010-2013) provides the unique perspective of being a part of it as it is happening and makes the analysis here immediately relevant to the ongoing debates surrounding the issue. There are many new developments that are occurring as this project is being finished (including the proposal of new Open Internet rules by new FCC Chairman Tom Wheeler in summer 2014) which will be taken up in a future version of this project.

Also, while I provide some context on how the issue plays out transnationally within the global governance of the internet, I am primarily concerned here with net neutrality in the US. Beyond the fact that this is the national context with which I am most immediately familiar and the one in which I have been situated as these events unfolded, the US is the place where net neutrality first appeared as an issue of concern. Further, with its position of power in global politics and its central position in internet governance as a legacy of its role in the development of the network, the policy adopted by the US government is very influential on other national and transnational internet regulations, meaning that the way net neutrality is dealt with in the US is a significant factor in how it plays out globally. I plan to expand the focus of my analysis in a future version of this project to include other areas, including places such as South Korea, Japan, Brazil, the European Union, and Africa.

Finally, I limit myself to what has been traditionally understood as net neutrality and the most prominent sites in which it has been taken up. As discussed below, I see net neutrality as a widely applicable principle that goes beyond just broadband access, but believe that it is most important to cover first the basic understanding of the issue before expanding its definition. Similarly, while net neutrality has played into debates that go on in many different policymaking contexts in the US, including Congress and the Federal Trade Commission (FTC), and I refer occasionally to important developments there, the heart of the battle has taken place at the FCC and so that remains the focus of this dissertation.

Emergent media policy and keywords

This dissertation is part of a larger research agenda that explores the regulation of media technologies when they are new and assesses the stakes behind these early decisions for media industries and users. The central research question behind this work is: How does public policy shape media as they emerge and what are the cultural and political implications of this process? Net neutrality serves as a case study through which to examine the dynamics by which policy structures emergent media systems and practices. This research agenda is situated within the field of communication and media studies, with contributions to the particular areas of media policy studies, media industries studies, and new media studies. I take a critical approach to this research, with a core focus on relations of power— how power structures communications and culture and how we might reach more fair and equitable structures of media. My research goals are linked to political goals, particularly in investigating communications policy and technology as specific sites where power is constituted and channeled and where work can be done to more fully realize the democratic public sphere functions of media systems. Specifically, I adopt a

framework that combines and builds on critical theories of media and cultural studies (MCS), political economy of communication (PEC), and science and technology studies (STS). The questions I ask about policy and technology are largely political economic (how media are structured), but the answers I find are more cultural in nature (social construction through discourse and ideology).

I work to theorize and develop an organized approach towards a field that I propose to call *emergent media policy studies*, through which we might gain better understanding of the role of policy in shaping new media. The history of old media when they were new brings to light the role of regulation in enabling and constraining the possibilities of what media systems become (Marvin 1988; Gitelman 2006; Hilmes 2012), particularly the constitutive choices made at critical junctures in development (Starr 2004; McChesney 1993). New media technologies often inspire utopian hopes and can open up very real new possibilities, but historically these promises have been thwarted as the powerful shape emergent media in their interests— what Brian Winston calls "the suppression of radical potential" of media technologies (1998).

I argue that policy shapes new media systems especially through the operation of what I call *emergent media keywords*: pivotal political concepts that shape the structures of emergent media. I draw here from Raymond Williams' theories of "keywords" (1976) as terms of power whose contested meanings represent pivotal cultural and political struggles. I find that this perspective on keywords' complex and contradictory circulation and operation, especially as they cross over between specialist vocabularies and everyday popular uses, can help us understand a discourse like 'net neutrality' and its influence in media policy and practice. In this dissertation I investigate how a series of terms that function as a "complex social vocabulary" (Keywords Project 2014) for media policy discourse work to shape the meaning and materiality

of the emergent media system of internet infrastructure. I assert that *neutrality* is a particularly important emergent media keyword that has played a crucial role in shaping the principles, policies, and practices of communications regulation in the early 21st century. This dissertation focuses on neutrality as a keyword and how it intersects with other 'difficult' terms with social prominence in media policy.

The emergent media keywords explored through this dissertation fall into two interrelated themes related to media policy, technologies, and cultural politics. The first set of keywords has to do with *access*, including tensions between information and telecommunications, inclusion and participation, and distribution and circulation. The second set of themes has to do with *freedom*, including distinctions between negative and positive freedom, private interests and public values, and property and commons.

To begin with, media access can be understood as an issue of *inclusion or participation*. Different conceptions of access run along lines of availability, affordability, and choice, but, following Liz Ellcessor (Forthcoming), the most empowering approach is to define "media access" as the ability to use and participate in media on equal footing. Following from this, we can see how it is not enough to address broadband access as just an issue of social inclusion— 'closing the digital divide' by pushing for greater availability of high-speed internet access to people of color and underprivileged communities— but additionally an issue of participation— not settling for just connection to social and cultural structures, but also having a voice that can be heard within them. Yet, as we will see, even many advocates for racial and economic justice have accepted a vision of internet access as primarily a means of accessing existing information that sells short its capacity for self-representation. This sacrifice of participation for inclusion fits the typical pattern of emergent media policy issues, where access gets expanded as a means for

consumption while being restricted as a means of production.

Secondly, access in the context of internet access services has two rival definitions in communications policymaking: *information vs. telecommunications*. As we will see, the FCC's varying application of these labels in the regulation of broadband internet access services has been the most consequential conflict around net neutrality. Classifying broadband as an "information service" in communications policy confers upon network operators publishers' rights of editorial control over internet content, while classification as a "telecommunications service" affirms users' free speech rights by ensuring common carriage of internet content.

The last matter of media access is the question of exactly what media allow you to do— whether internet media operate on a model of *distribution or circulation*. Henry Jenkins identifies these as two contrasting logics for the transmission of media content— distribution, where the movement of content is largely controlled by the commercial interests that produce and sell it, and circulation, where user participation in the sharing of content leads to more unpredictable, unruly, and empowering flows across contexts (et al. 2013). Jenkins argues that the distribution model is outdated in a media environment no longer characterized by centralized production of discrete finished products and mass audience consumption and that the internet has enabled a shift from distribution to circulation as the principal model of media transmission— part of online participatory culture that he refers to as "spreadability" (et al. 2013). While Jenkins' celebration of the possibilities offered by internet media provides a valuable vision of what the future could be, it ignores the ways in which the concentrated corporate control of internet infrastructure has actually initiated a shift in the opposite direction— circulation being channeled toward distribution. Indeed, we will see how network operators are reshaping the internet from an open infrastructure that facilitates participation in the spread of communications

toward a closed delivery system for media industry content.

Moving on to the set of keywords related to freedom, there are key competing conceptions of it considered here: *negative freedom vs. positive freedom*. Freedom is a keyword in the US if there ever was one— we hear it used incessantly, yet its meaning diverges greatly depending on the ideological context within which it is deployed. Isaiah Berlin's classic account of American traditions of 'freedom' (1958) distinguishes between "negative liberty" as freedom *from* external interference and "positive liberty" as freedom *to* meaningfully participate in social structures. In the context of freedom of speech, this has been referred to as the "defensive vs. empowering" approaches to free speech (Stein 2007) or the "negative vs. affirmative conceptions" of the First Amendment (Nunziato 2009). Net neutrality has proven unusually capable of drawing attention to this distinction, the tensions it lays bare in relationships between those who provide access to speech (like network operators) and those who speak (like internet users), and the ways in which legal and regulatory discourse has moved during the neoliberal era toward an understanding of freedom favoring the former at the expense of the latter.

Next up is the articulation of 'freedom' to the tensions between *private interests and public values*. Especially during the rise of neoliberalism in global political economic ideology since the 1970s, private interests based in assumptions of market relations and prioritizing corporate profit over all else have been the basis of media policy, bringing with it the rollback of commitments to public values in the regulation of communications infrastructures (Freedman 2008). While the internet was designed in accordance with public values of openness and equality (van Schewick 2010), its development was a distinctive product of the articulation of private interests and public values in technological development and regulation (Streeter 2010), and it has come to be uniquely positioned as a public sphere in private space (Papacharissi 2010). The battle over net

neutrality— a principle of the internet's original public values that has been asserted in the face of the growing influence of private interests in the management and regulation of internet infrastructure— brings these dynamics into relief. As we will see, media policy discourse that defines digital network infrastructures as privately controlled resources and not universal public utilities has been crucial in leading even purported net neutrality policy to encourage more centralized control over internet access, seen perhaps most clearly in the splintering of private networks from "the public internet."

Finally, freedom is held in tension between the terms *property* and *commons*. The libertarian worldview increasingly exploited by corporate interests sees private property rights as fundamental to freedom in an individualistic sense. However, the longstanding collectivist conception of freedom understands the importance of the commons— resources not owned or controlled by any particular party, but rather openly shared— as enabling to freedom. The internet is fundamentally based in the management of both informational and material resources as a commons (Benkler 2006; Lessig 2001) and net neutrality is an integral part of the tradition of the commons infrastructure that made it possible for the internet to become so vital to such a wide and diverse variety of uses (Frischmann 2012). As we will see, a major part of the erosion of net neutrality— and along with it a commons infrastructure vital to democratic communications— is the assertion of private property claims by network operators that more and more trumps the common concerns of everyday internet users.

This focus on keywords in the emergence of media does not see the structures of media systems as simply determined by policy or technology alone, but through a complex nexus of policy, technology, and culture that affords and delimits the options for design, development, management, and use of media. Emergent media policy decisions in the US context have

historically resulted in the enclosure of initially open media technologies in a way that favors private commercial interests over participatory public values, the result of a policymaking process dominated by the material and discursive influence of elites and corporations.[7] Net neutrality is an emergent media policy issue with great influence on the shape of internet infrastructures and the history of the FCC's Open Internet regulations reveals ways in which the first steps taken toward a resolution have been down the familiar path of enclosure and corporate control. However, the internet has not yet reached a stable form and at the time of this writing the net neutrality battle rages on, making this study of net neutrality not only a unique contribution to an understanding of media emergence but also an urgent effort to add something to the fight for more democratic media.

In addition to developing a framework for emergent media policy studies, this project makes interventions into two ongoing scholarly endeavors. The first involves making boring stuff sexy; the second involves making the sexy stuff a little more boring. One thing that the core objects of study in this dissertation— policy and infrastructure— have in common is a notorious reputation as dull, tedious, and inherently uninteresting. In fact, both policy and infrastructure have been the topic of rather famous calls to "study boring things" (Lentz 2009; Star 1999). While perhaps masochistic, I answer both of these calls in this dissertation, because I agree that policy and infrastructure are so vital to study precisely because they are 'boring.' It is not a coincidence that both policy and infrastructure are generally impenetrable to all but insiders and that there is great power that comes with such invisible control over these systems. The inner workings of policy and policymaking are rarely covered in mainstream media, so they further receive little public attention. Policy and infrastructure are the domains of the lawyers, economists, and technologists who properly speak the languages that operate there, we are told,

not for academics from outside the technocratic legalese priesthood and certainly not for the everyday citizens whose interests are meant to be served there. 'Boring' is strategically deployed within the workings of policy and infrastructure in ways that obscure the actually quite sexy battles for control over communications.[8] With this in mind, part of the job of studying media policy and infrastructure should be to bring attention and analysis to these imperative and compelling objects of study from more culturally conscious perspectives— making the boring stuff sexy— and also to make this kind of work a part of scholarly conversations on media culture that tend to ignore such dry stuff— making the sexy stuff a little more boring.

In order to get at the interests of policy and infrastructure, the first task is to advance critical cultural approaches to media policy and infrastructure. Positivist empirical perspectives of classical and econometric legal analyses and applied science and engineering still dominate studies of the regulations and technical systems of media and communications, but there is a productive movement of critical cultural interpretive analyses of media policy and infrastructure, led most significantly by Streeter (2013) and Christian Sandvig (2013). This project should be considered in line with such work that seeks to further critical approaches within policy studies, to better account for the intriguing and significant cultural politics that hide in the arcane bureaucratic minutia of administrative legal rulings and the technicalities of data packet flows along underground wires. In my analysis of net neutrality here, I particularly take up discourse analysis as it functions within the cultural studies tradition and employ it as an alternative interpretive method of policy and document analysis that helps to reveal and critique the relations of power and ideology that flow underneath the tidy rationalized exterior of policy and infrastructure operations. The vast majority of the scholarly work done on net neutrality thus far has been from the dominant paradigm of law, economics, and network engineering, so this study

of net neutrality as a discourse and a cultural conflict expands the legal and technical conversation in a productive direction.

The flip side of this coin, however, is to more fully ground critical cultural studies of media in the workings of policy and infrastructure. Broadly speaking, media and cultural studies is unfortunately not immune to the assumption that policy and infrastructure are intrinsically dull and— especially as an intellectual tradition more closely associated with the crucially important but more self-evidently 'fun stuff' of popular culture textual and audience analyses— getting traction for moving the 'boring stuff' toward the center of the field is rather difficult. Perhaps the most frequent comment I get when I describe my research agenda to a fellow media studies scholar is something along the lines of, "That sounds important— I'm glad somebody's doing it, so I don't have to!" Studies of media policy and infrastructure exist largely on the margins of the scholarly conversation within media studies, most often talking to just those few others who already understand and care about it. When policy or infrastructure do make their way to core media studies dialogues it is most often in a 'you have to eat your vegetables' sort of moment, as the obligatory broccoli that sits to the side of the meat and potatoes of the inquiry itself.[9] This has begun to change recently, largely as part of the 'industrial turn' and 'material turn' in media and cultural studies beginning around the late 2000s, with Jennifer Holt (2014) representing the rare scholar working to take both policy and infrastructure to the top of the research agenda in the field. This is encouraging, but there is much to be done to more fully stake out a place for policy and infrastructure at the head table in the field, especially as objects of study in their own right and not just limited to their relevance to concerns within media industries, such as with the resurgence of interest in media distribution (see Perren 2013).

Net neutrality represents an exciting opportunity to raise the profile of policy and

infrastructure within media studies and to more fully flesh out understandings of their workings within the field— net neutrality is that rare 'boring' issue that has successfully gained some notoriety as actually somewhat sexy. This project takes advantage of the opportunity of net neutrality to contribute attention to and explanation of the too often ignored and too little understood workings of media policy and infrastructure. The research presented here covers new ground for media studies, as the first full-length consideration of net neutrality as a media policy issue from a critical cultural perspective. Not only does this add to the scholarly historical record for this important period, but it also makes a case for policy and infrastructure as compelling and imperative focuses for media and cultural studies. My analysis further seeks to work out tensions between the sets of keywords introduced above in order to take from the case of net neutrality lessons we can learn about media policy discourse generally. Before we dig into how net neutrality has been constructed discursively and the implications of this for emergent media infrastructure, though, we ought to establish a basic understanding of what net neutrality even is.

What is net neutrality?

There are two related but different ways of understanding net neutrality that will be developed in this dissertation— as discourse and as policy. Both are based in the principle of 'network neutrality'— which is not a merely a longer synonym for 'net neutrality' but is the original best practice principle in network management that gave rise to net neutrality discourse and policy. For all the mystification around it, distilled to its basic essence, network neutrality is actually a rather simple principle*: network operators should not interfere with the activities of the users of the network*. This has been a longstanding ground rule in internet governance from its early days of informal norms and standards, but with the privatization and commercialization of internet infrastructure, it began to be eroded in practice. With this principle as its basis, a discourse of net

neutrality emphasizing fairness, equality, and openness rose up around and beyond it. At its heart, net neutrality discourse is about universal access to everyone and everything on the internet on equal terms— protecting internet traffic from blocking or discrimination based on user or use of the network. As the discourse made its way in policy circles, net neutrality came to also be defined as policy to preserve openness on the internet: specific rules prohibiting blocking or discriminating among content, applications, services, or devices on the internet. While there is wide agreement on net neutrality in principle and the discourse of net neutrality has been influential, attempts to implement such regulations have been met with decidedly mixed results. In following the discourse surrounding the FCC's Open Internet Order of 2010, this dissertation tells the story of a largely failed attempt at net neutrality policy. Here I would like to address four specific aspects of net neutrality necessary to introduce the issue, related to its history, politics, technologies, and geography.

First, even though some have insisted that it is a made-up solution in search of a problem, *net neutrality has a long history*. When legal scholar and advocate Tim Wu coined the term in a seminal law journal article, he was not so much introducing a new concept as putting a name to the principle of openness and nondiscrimination by which the internet had been governed since its inception (2003). Net neutrality comes out of two traditions— one technological, one regulatory— which enabled the open architecture and equitable access that once characterized the internet. The technological tradition (which informed computer network design since the 1960s) is the "end-to-end argument" for general-purpose network design that enables a wide variety of uses and emphasizes end user control rather than centralized management (Saltzer, Reed, and Clark 1984). The regulatory tradition (dating back at least as far as 15th century English common law) is common carriage, the state-enforced duty of basic communications

providers to serve all on an equal basis.[10]

Net neutrality— once a built-in result of end-to-end architecture and common carriage regulation— only became an issue of concern once these enabling conditions were gone. As cable companies began providing internet access for the first time during the transition to broadband around the turn of the millennium, in addition to developing network management technologies that afforded them a greater degree of control, they pushed back against openness regulations. Since the 1980s, in the FCC's influential Computer Inquiries and codified in the Telecommunications Act of 1996, "telecommunications services" have been regulated separately from "information services." Telecommunications services are basic infrastructure (the conduit) while information services make use of that infrastructure to publish (the content). In keeping with the common carriage tradition, the FCC regulates the conduit to ensure open access to the content. Yet, beginning with the Cable Modem Order of 2002 and affirmed by the Supreme Court in the *Brand X* case in 2005, the FCC regulates broadband internet access not as a telecommunications service subject to common carriage regulation, but as an information service that enjoys publishers' rights— the decision that doomed the agency's multiple attempts to implement Open Internet rules and still as of this writing haunts its net neutrality policy. This history is laid out throughout this dissertation, especially in Chapters 2, 3, 4, and 5.

Second, net neutrality is a principle of *public values over private interests*. The story of net neutrality is too often described in the terms of corporate warfare (bold Silicon Valley innovators battle incumbent phone and cable companies!). What gets left out of this reductive frame, however, is the average internet user, who stands to lose the most without net neutrality protections (not to mention that the relationship between online content providers and broadband providers has increasingly shifted from combative to collusive anyway).[11] When reduced to a

fight over revenue streams, net neutrality loses its meaning as a matter of equitable access to the means of creativity and circulation.

Net neutrality is ultimately about providing for participation in the public sphere. As a principle of openness and nondiscrimination, net neutrality supports public values of equality and fairness crucial to democracy and can be conceived of within the affirmative tradition of free speech (Nunziato 2009). Although the dominant discourse of the First Amendment today tends to see the state's role regarding free speech as just staying out of the way, there is a long history of government intervention to actively empower citizens with the ability to express themselves and be heard on equal terms. As an update to the common carriage regulation that comes out of this conception of free speech, net neutrality is a way of assuring that the essential communications infrastructure of the 21st century is an openly accessible resource (Crawford 2013). It is a principle that comes from recognition that the private interests of the marketplace alone cannot protect the public values of democratic communications. This relationship between net neutrality and public values is covered more extensively later in Chapters 2, 3, 5 and 6.

Third, net neutrality is a *battle over the shape of internet infrastructure*. Net neutrality articulates a particular vision of the internet that differs from that of the owners of its underlying infrastructure. Internet service providers (ISPs) occupy a bottleneck position as the "last mile" of the network, which they seek to leverage into gatekeeper control over the traffic that flows back and forth to the rest of the network. This represents a fundamental reshaping of the internet from a universal public infrastructure for the multi-directional circulation of communication and culture into a private delivery system for media industry content.

It is necessary to ensure a basic understanding of how the infrastructure of internet access functions before focusing in on the changes to these structures that the debate around net

neutrality brings to the fore. Toward this end, I will briefly sketch a necessarily simplified but nonetheless illustrative model of how the physical infrastructure of internet access works.

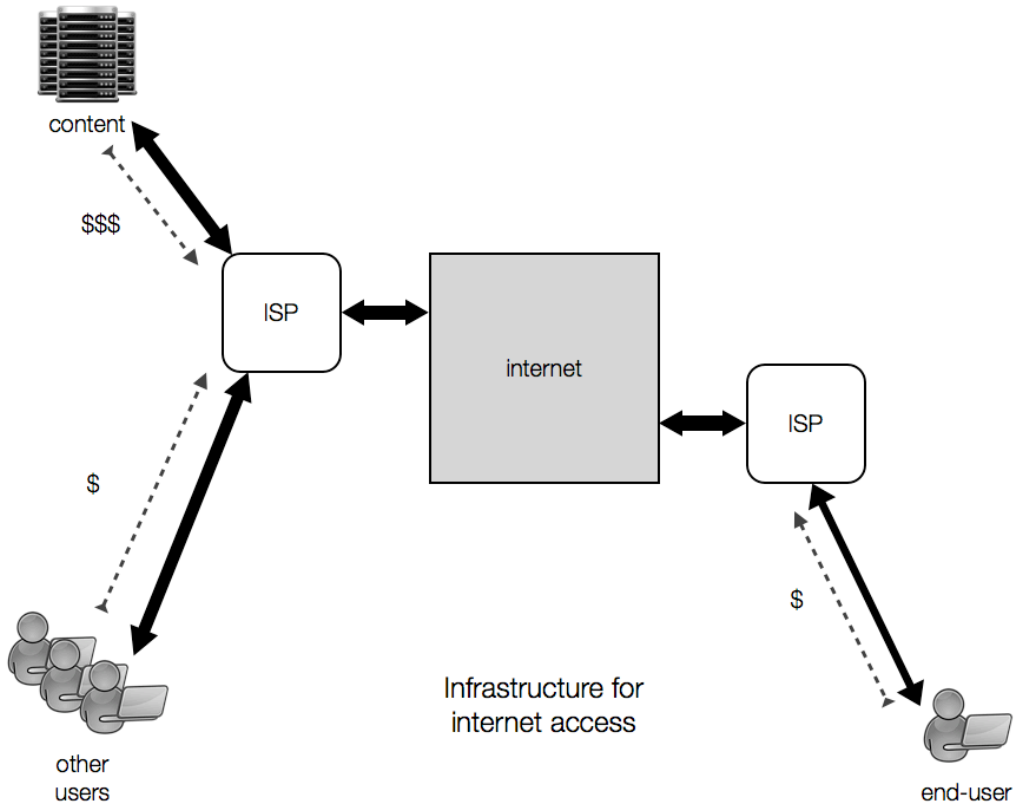

Figure 1: Traditional internet access infrastructure (diagram by author)

Figure 1 depicts a simplified view of the physical infrastructure for access to the internet and the institutional arrangements for the flow of traffic on the network. Let us trace the typical way it works for an end-user (such as an everyday individual) to access something or someone on the internet— content like a website, blog, Google search, or Netflix video, or communication with another user like a tweet, email message, or YouTube video. First, an end-user requests data

from servers on the network, whether stored in data centers run by large content providers like Google, Amazon, or Netflix, or originating from other users. Next, that data is passed from those servers to the backbone of the internet by the ISP that provides internet access to the content provider or user (for large content providers this would be either a transit ISP such as Level 3 or Cogent, or content providers' own transit network). Then, backbone providers that operate the core of the internet (large-scale telecommunications providers like AT&T, Verizon, and Tata) transmit the data through their networks to the ISP that provides the end-user with internet access. Finally the end-user's ISP (a consumer broadband provider like Comcast, AT&T, Verizon, or Time Warner) connects that data to the end-user's device. Within this typical arrangement, content providers pay into the operation of internet access infrastructure one of two ways: by either subscribing to an ISP (just like any user of the internet, except with much higher capacity) or investing in their own infrastructure by building their own network to connect themselves to the internet.

This traditional arrangement for internet traffic is what broadband providers like Comcast, Verizon, and AT&T are trying to change. These ISPs are more interested in being distributors than dumb pipes and they want a piece of the new revenues being generated by online video and mobile apps— especially given that the legacy business models of the large cable and phone companies that dominate the broadband market are being threatened by those 'over-the-top' services (Vanderhoef and Sanson 2014). Their desired model is what economists call a 'two-sided market' and what most people would call double dipping— or collecting protection money (Lee and Wu 2009).[12]

There are two particular ways ISPs are moving toward this broadband discrimination model: pay-to-play arrangements and "specialized services." These two models of a post-net-

neutrality future are analyzed in more detail later in this dissertation, in Chapters 4 and 6 particularly, but we can briefly introduce them here.

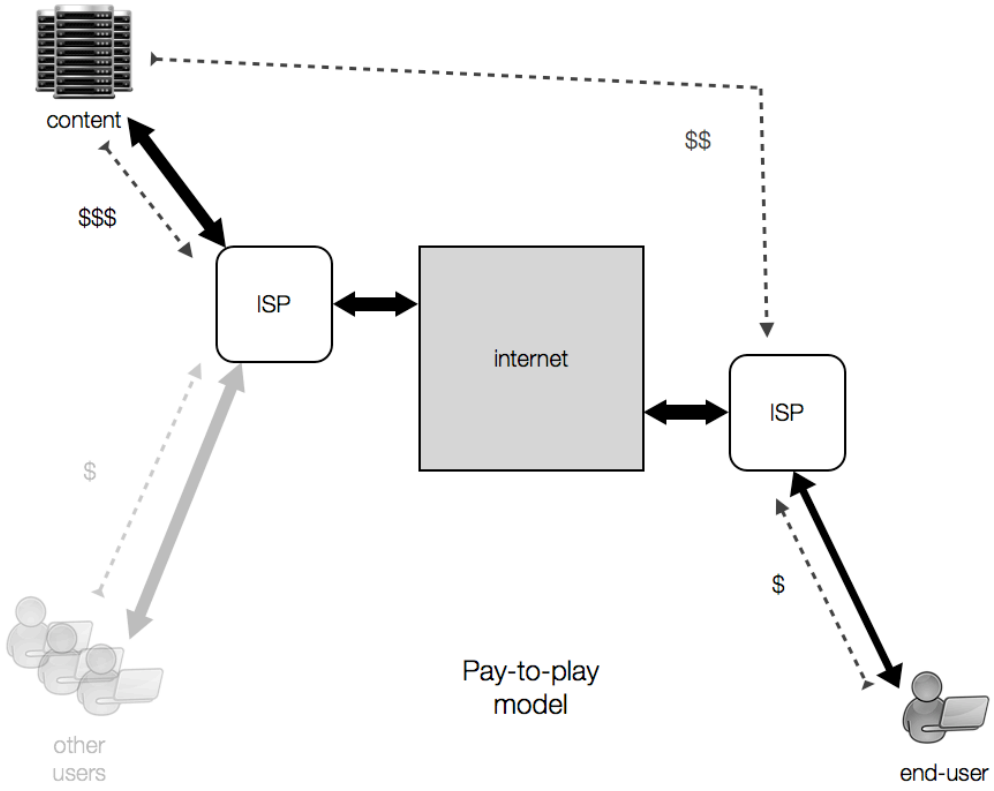

Figure 2: Internet access infrastructure under a pay-to-play model (diagram by author)

As depicted in Figure 2, pay-to-play arrangements impose various charges on content providers by the end-user's ISP, typically in exchange for some sort of preferential treatment, but it effectively becomes a toll collected by ISPs to allow the content provider to reach its users.[13] This has already become a standard practice in many places around the world.[14] It is problematic not only because it adds to the amount content providers already pay for access to the internet, raising costs that will ultimately be passed along to users, but also because the large content

providers who can afford this payola exercise an unfair advantage over smaller startups or everyday users.

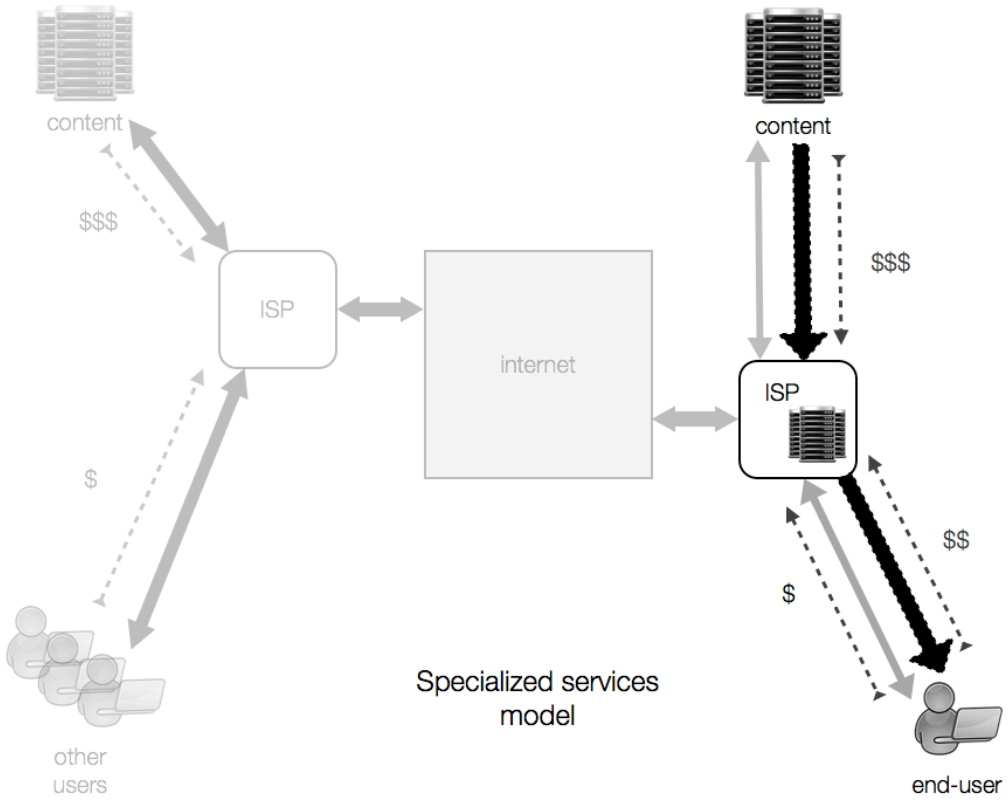

Figure 3: Internet access infrastructure under a specialized services model (diagram by author)

As shown in Figure 3, specialized services involve running private networks ostensibly distinct from "the public internet."[15] Also known as "managed services," these differentiated fast lanes on broadband pipes have been commonly used for the ISP's own IPTV (Internet Protocol television) or VoIP (voice over Internet Protocol) services, but many deals involving other content and applications are in the works.[16] This is troubling because it splits a formerly unified

internet into multiple 'internets' that are separate and unequal. In what is often referred to as the 'dirt road scenario,' ISPs and the corporations that can afford to pay them for uncongested priority distribution travel smoothly on their own toll road, providing incentives for investment and innovation only on the private internets, while smaller users are confined to a crowded parallel 'dirt road,' effectively squeezing out the public internet and marginalizing public participation in online media creation and circulation.

Fourth, net neutrality is a *principle understood and applied differently in particular policies, practices, and places*. There tends to be wide agreement on net neutrality in theory, but there have been uneven results when it comes to putting it into practice. The deeply compromised and ultimately untenable version of net neutrality in the FCC's Open Internet rules is just one example of a struggle going on in countries around the world. Net neutrality laws in Chile, the Netherlands, and Slovenia are encouraging, and the groundbreaking *Marco Civil da Internet* in Brazil can serve as a great model for national legislation.[17] Net neutrality remains in disarray in many countries, though, seen in the faulty schemes of co-regulation in Canada, Japan, France, and the United Kingdom (Marsden 2013). Even South Korea, oft cited as a broadband paradise, has a troubling approach to net neutrality policy.[18] Further, internet filtering by states like China, Russia, Iran, and Syria is too often considered a separate issue from net neutrality (Deibert, et al. 2008, 2010, 2011), but restricting expression online should be understood as censorship whether done by governments or corporations.

As a broad principle for a global network, net neutrality should be valued and practiced transnationally. The European Union is one of the most prominent sites of debate around net neutrality, where the strong net neutrality provisions of the 2014 Telecoms Single Market legislation at the European Parliament has surprisingly survived familiar industry attacks.[19] In

many ways, the most important regulation of internet infrastructures comes from the shared norms generated and diffused through the multistakeholder processes of global internet governance, which are very influential on policies and practices around the world. Net neutrality is making headway as a principle within the collective deliberations between public, private, civil society, and academic representatives that take place within these bodies, such as the model framework being developed by the Dynamic Coalition on Network Neutrality at the Internet Governance Forum.[20]

The ideas of openness, fairness, and equality articulated in net neutrality can be a powerful foundation upon which to base other internet policy issues, too. Net neutrality is typically narrowly understood to apply only to the way ISPs manage their networks—and usually only how consumer ISPs connect to end-users, excluding connections with transit ISPs and backbone providers. However, that understanding is beginning to change as more attention is paid to the net neutrality implications of other aspects of internet infrastructure, such as peering agreements between ISPs and/or content providers, the operation of content delivery networks (CDNs), and the placement of data centers (Tussey and Sanson 2011). Net neutrality is also increasingly being seen as part of a larger normative project that can be applied to any intermediary that plays a gatekeeping role in access to information and communication, including other 'platforms' like search engines, social networking sites, and media hosting services (Gillespie 2010). Net neutrality should further be seen as closely related to issues of surveillance, intellectual property, corporate ownership, and digital divides. Prominent examples include the ongoing revelations of National Security Agency (NSA) spying by Edward Snowden, the SOPA (Stop Online Piracy Act) uprising in 2011-2012, the further concentration of the broadband market, and the persistent unevenness of internet access both nationally and

globally— all of which either reveal or give rise to increased interference with what we do on the internet and a distinct lack of neutrality. While there is no such thing as a truly 'neutral' network, net neutrality remains an important conceptual vehicle through which to address the necessity of equitable access and participation online. Beyond the case of the FCC in the US and the core conception of net neutrality focused on here, it is important to keep in mind how it plays transnationally and across contexts. This has been a basic introduction to net neutrality, which will be further contextualized in the next chapter. Before we get to that, however, I will first lay out the course on which this dissertation will proceed.

Overview of chapters

Chapter 1 places net neutrality in *historical and theoretical context* and lays out the theory developed through this dissertation. The first three sections review and synthesize relevant theories of media policy discourse, network infrastructure technologies, and the public sphere, respectively. The fourth section sketches a theoretical framework for what I call *emergent media studies*. In each of these sections, I combine critical theories from media and cultural studies, political economy of communication, and science and technology studies to understand how media emerge to take the shape they do. In the final section, I extend this emergent media studies perspective to a revisionist meta-history of media including telephony, film, radio, and television that shows the role of public policy in the process of media emergence. From there I go more in depth into the history of cable, with a focus on public access cable television, the 'blue skies' discourse and policy that gave rise to its participatory culture in the 1970s-1980s, and the deregulation and cultural change that led to its disintegration. With the case of public access television specifically and across old media when they were new generally, this chapter makes comparisons to the emergence of internet media to highlight the historical precedents to net

neutrality. Through this chapter, we will see how the net neutrality battle parallels historical turning points of older communications networks when they were new, which began open but became enclosed with important regulatory decisions analogous to the ones discussed in this dissertation.

Chapter 2 explores *the discourse of 'net neutrality,'* tracing a historical genealogy of the principle. It applies the methods of discourse analysis to the use of 'net neutrality,' related terminology, and their articulations through media coverage, legal and technical literature, corporate and advocacy group messaging, and policy documents, from 2003 to 2013. The first section sketches the discursive construction of 'net neutrality' and its articulations to technical discourses of efficiency and innovation, economic discourses of consumer choice and marketplace competition, and civic discourses of free speech and civic engagement, as well as hostile discourses such as libertarian articulations to unnecessary government intervention. The second section shows shifts in net neutrality discourse, to new discursive formations such as 'internet freedom' and 'open internet,' the latter of which played a central role in shaping FCC Open Internet policy beginning in 2009. The final section offers some thoughts on the relative efficacy of various discursive formations for the development of net neutrality policy. This chapter shows how the articulation of the net neutrality principle to different discourses and values both enabled and constrained the possibilities for its enactment in policy. Specifically, 'net neutrality' brought together a diverse discursive alliance that pushed the issue forward around 2006, but the discursive shift away from 'net neutrality' and toward 'open internet' in official policymaking proceedings worked to depoliticize the issue by disarticulating it from the principles of its initial discourse.

Chapter 3 analyzes some specific *terminology* of importance to net neutrality and its role in

media and communications policy. We will look closely at 'information' and 'telecommunications' as keywords that unlock a deeper understanding of the concepts underlying net neutrality and the ways it was attempted to be implemented in FCC policy. Through discursive, political economic, and legal analysis of legislative, regulatory, and judicial documents including texts key to the history and pre-history of net neutrality policy, I seek to discover the power that comes with naming technologies along lines of 'information' or 'telecommunications.' The first section discusses how 'information' and 'telecommunications' are defined and deployed as discursive formations at the FCC, drawing from the Commission's precedent-setting Computer Inquiries from the 1960s to the 1980s and the Telecommunications Act of 1996. It builds on this to show how the net neutrality fight was kicked off in earnest with the definition of broadband internet access as an "information service" in the FCC's Cable Modem Order of 2002 and the *Brand X* Supreme Court decision in 2005. The second section considers the act of classification and the discursive power it confers in regulation with an analysis of the 2008 *Comcast v. FCC* appeals court decision that brought into relief the legal implications of the FCC's choice to classify broadband as a technology for accessing others' information, not carrying everyone's communications. The third section delves into the regulatory traditions underlying the definitions and classifications based in the terms of 'information' and 'telecommunications.' It particularly focuses on the common carriage tradition and its relation to an affirmative conception of First Amendment free speech rights. This chapter finds that the way that media technologies are defined in regulatory policy is an exercise of great discursive power, with important material and political consequences— the operative definition of broadband in communications policy that underlies net neutrality regulation shows this to be the case. The legal context is the focus in this particular chapter— specifically, how the FCC's

terminology underlying broadband policy put in jeopardy the judicial defensibility of the Open Internet rules— but the terminology discussed in this chapter is considered in its role in shaping the infrastructure of the internet and the online public sphere in later chapters.

Chapter 4 investigates *the policymaking process* for the FCC's 2010 Open Internet rules. This chapter follows the FCC's Open Internet proceeding from the rules' proposal in 2009, to their adoption in 2010, until the official enactment in 2011, bringing aspects of cultural studies, political economy, and political science approaches to an understanding of power and process in media policy advocacy and policymaking. Looking at participation in the process by corporations, advocacy groups, and members of the public, this chapter draws from comments, filings, and statements in and reportage on the official proceeding, as well as the messages and commentary that circulated around the policy arena in corporate and advocacy group messaging and everyday citizens' remarks, supplemented with some oral history recollections from participants. The analysis here concentrates on three particular sets of relations among stakeholders on various sides of the net neutrality debate, each elaborated in its own section. The first considers citizens and media advocacy groups. Looking in particular at Free Press's Save the Internet campaign and Americans for Prosperity's Internet Freedom Coalition and these groups' interactions with and actions on behalf of citizens in the policymaking process, the analysis here is concerned with how public opinion and the voice of 'the people' get represented in the policy sphere. It concentrates on the degree to which citizens are able to directly participate in this process in a meaningful fashion and how much media advocacy organizations channel public discourse to policymaking discourse. The second considers broadband providers and civil rights advocacy groups. It particularly looks at the complex and contradictory reasons why some organizations representing communities of color such as the Minority Media &

Telecommunications Council advocate against net neutrality policy, related to their financial and discursive connections to broadband providers including AT&T and Comcast. The third considers online content providers and broadband providers. It specifically focuses on the negotiations brokered by the FCC between these two sets of companies with the most financially at stake on either side of the net neutrality debate and how out of this the powerful 'frenemies' Google and Verizon came to write their own rules— which would then become the official Open Internet rules. Within this chapter, each of these intersections can be seen as points of negotiation that represent particular aspects of the complex adversarial and coalitional dynamics across and among the stakeholders involved in the process of making the Open Internet rules, together showing how the material and discursive power relations between these corporations, advocacy groups, and citizens influenced the rules as adopted.

Chapter 5 examines the *policy text* of the Open Internet rules. Through a close reading of the FCC's Open Internet Order of 2010, informed by political economic and legal analysis, this chapter breaks down each of the rules and evaluates their efficacy in protecting net neutrality. The first section takes up the three core rules that the Order applies to fixed broadband internet access providers: transparency, no blocking, and no unreasonable discrimination. The second section then explains the two major exceptions to these rules: the "reasonable network management" exception and the distinction of wireless broadband from wired that exempted the former from the nondiscrimination standard and parts of the no-blocking rule. The third section provides context to the Open Internet Order by laying out the debate surrounding the FCC's eventually scrapped so-called "Third Way" proposal, which acts as a sort of coda to the discussion of the implications of classification decisions in regulatory processes. The analysis in this chapter shows how the broadband access regulations adopted by the FCC in the 2010 Open

Internet rules were a deeply compromised set of protections that fell short of what is necessary to implement the principle of network neutrality in a meaningful and sustainable manner.

Chapter 6 discusses the *aftermath* of the Open Internet rules. Taking a critical approach to media industries studies and infrastructure studies, the analysis in this chapter focuses on two particular contexts in which a pending post-net-neutrality world began to take shape after the Open Internet Order, each developed in its own section. The first context is the telecommunications industry, where in the wake of ineffective and then nonexistent net neutrality protections, broadband providers began by 2013 to unveil business models that count on and profit from traffic discrimination. This is examined through a case study of AT&T's mobile broadband service and the selective enforcement of its data caps. AT&T's Sponsored Data plan, where mobile application providers pay AT&T for their traffic to not count against users' monthly data usage totals, is a clear example problematic pay-for-play, where the broadband bottleneck becomes a site of toll-collecting to reach users and broadband providers take up the role of gatekeeper of online circulation. The second context is that of internet infrastructure, where the material existence of the network itself is being remade in an environment without effective protection for net neutrality. This is investigated in a case study of Comcast's Xfinity IPTV service and what it represents in the splintering of multiple 'internets.' In Comcast's preferential treatment of its own Xfinity service, such as not counting Xfinity-on-Xbox traffic against users' data caps and prioritizing its traffic flows, we can see an underlying logic of constructing private networks distinct from "the public internet" and any of its expectations or protections for fair and equitable structures. Overall, this chapter shows how the prevailing political, industrial, and technical understanding of the internet began to shift after the Open Internet Order, where the participatory possibilities of unconstrained circulation and

dialogical communications gave way to a logic of network discrimination and 'separate and unequal' treatment.

The Conclusion reviews the points of earlier chapters, updates the analysis undertaken in the body of this dissertation, and points toward the future of the net neutrality debate. It focuses in particular on an examination of the *Verizon v. FCC* case that struck down the Open Internet Order in 2014, shortly before this writing was completed. The analysis here finds that the *Verizon* case shows not only the legal weaknesses of the Open Internet regulations but also reveals how the discursive terrain the FCC has operated on in the net neutrality debate limits democratic communications possibilities. Not only did the rules prove to be legally untenable as a result of the classification decisions discussed earlier but also the defensive negative conception of freedom of speech embedded in the FCC's approach to net neutrality policy fundamentally undermines an empowering affirmative model of democratic communications. I conclude by offering some closing thoughts on ways that the study and implementation of net neutrality might proceed.

Notes

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[5] Order, In the Matter of Preserving the Open Internet ("Open Internet Order"), FCC Rcd. 17905 (2010), https://apps.fcc.gov/edocs_public/attachmatch/FCC-10-201A1.pdf.

[6] This is an admitted shortcoming of this project: not enough interviews. I have had informal conversations and gained knowledge through oral histories from some policymaking process participants, but will be developing those contacts into more formal interviews in future versions of this project. These conversations are cited here anonymously as relevant.

[7] This focus on commercial dominance is particular to the context of the US, but a similar dynamic of top-down institutionalization of media systems has played out historically in elite shaping of public service media systems such as the BBC.

8 Part of this project is to help explain how regulatory discourse is exclusionary and how to understand these issues so that the public so might be able to intervene, as well as making the process work better for meaningful participation.

[9] Perhaps fittingly, I actually think broccoli is delicious.

[10] See: "Common Carriers." *Cybertelecom*. 2014. Web. 03 July 2014. <http://www.cybertelecom.org/notes/common_carrier.htm>.

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Chapter 1

Media Policy Discourse, Democratic Communications Infrastructure, and Emergent Media

This chapter places net neutrality in historical and theoretical context and lays out the theory developed through this dissertation. The first three sections review and synthesize relevant theories of media policy discourse, network infrastructure technologies, and the public sphere. The fourth section sketches a theoretical framework for what I call *emergent media studies*. In each of these sections, I combine critical theories from media and cultural studies, political economy of communication, and science and technology studies to understand how media emerge to take the shape they do. In the final section, I extend this emergent media studies perspective to a revisionist meta-history of media including telephony, film, radio, and television that shows the role of public policy in the process of media emergence. From there I go more in depth into the history of cable, with a focus on public access cable television, the 'blue skies' discourse and policy that gave rise to its participatory culture in the 1970s-1980s, and the deregulation and cultural change that led to its disintegration. With the case of public access television specifically and across old media when they were new generally, this chapter makes comparisons to the emergence of internet media to highlight the historical precedents to net neutrality. In this chapter, I draw from media history and theories of discourse, infrastructure, and the public sphere to develop a conceptual framework through which we may understand net neutrality and its influence on emergent media systems. I also argue that the net neutrality battle parallels historical turning points of older communication networks when they were new, which began open but became enclosed with important regulatory decisions analogous to the ones

discussed in this dissertation. Let us begin with a discussion of discourse and its role in the politics of media policy.

Net neutrality as media policy discourse

The primary object of study in this dissertation is media policy. As opposed to most studies of policy— including nearly all of the work on net neutrality— it does not take a (neo)classical legal, economic, or political science approach. Rather than working within these typically positivist theoretical frameworks, I engage with media policy critically and apply methods of discourse analysis. Policymaking is too often taken at face value, buying in to the assumptions that it is a pure, factually defined, rational process. However, when examined discursively, we can see that policymaking is actually messy political business— the product of complex relations of power, operating on a terrain of structural inequality, and depending as much on cultural legitimization and rhetorical strategy as on technical or legal 'facts.' The power to define the situation within the policy sphere is the power to structurally enable certain practices and delimit others— a discursive approach allows us to ask who holds that power of defining. Looking at policymaking from this perspective allows us to see why and how discourse matters for important political decisions— rhetoric is never 'just rhetoric.' Then we can not only see more clearly the conflicts and contradictions inherent in the policymaking process but also perhaps take the first steps toward making that process work better to encourage more fair and equitable structures of communication, information, and expression. Before discussing discourse analysis of media policy, and the specific ways in which this dissertation will apply and extend this approach, I will first review and challenge the 'common sense' of policy and policymaking.

In the US, across the 20th century and into the 21st, policy has been typically understood as

a set of orderly objective procedures that address shared problems— as "policy science" informed by a liberal pluralist disposition. Arising primarily from the vision of Harold Lasswell laid out in his influential work "The Policy Orientation" (1951), policy is a form of governance based on the systematic application of expertise. In being positioned this way, 'policy' is specifically contrasted with 'politics.' While the latter is marked by partisanship, corruption, and messy conflict, the former is said to operate through clean, rational processes to reach the optimal outcome. Further, policymaking in the US is meant to work democratically, consistent with public values. In particular, the policymaking process is based on the model of liberal pluralism within a representative democracy. The policy science expertise is supposed to result in the implementation of legislation created by elected representatives, done on the people's behalf and with their best interests at heart. The policymaking process, then, is to be informed by liberal pluralist principles of transparency, accessibility, and deliberation, providing opportunities for all stakeholders to participate in debate about the issues and work out broadly beneficial compromises to solve the problems at hand. For an example of this dominant view, the standard textbook of public policy studies (Theodoulou and Kofinis 2003) presents the policymaking process as a progressing through an orderly, rational series of stages: problem identification, agenda setting, choice, adoption, implementation, evaluation, and termination or change.

Rather than taking for granted the processes and products of policy as scientific and admirably democratic, my focus in on "the politics of policy." Spurred initially by Thomas Streeter's groundbreaking *Selling the Air* (1996), critical analysis of "the politics of media policy" has been elaborated by scholars including most notably Des Freedman. In *The Politics of Media Policy* (2008), Freedman shows just how dirty and messy policymaking is— a process

marked by social struggle within uneven structures of influence. Echoing critical policy scholars such as Streeter (e.g., 1996, 1997, 2010), Robert McChesney (e.g., 1993, 2004), and Sandra Braman (e.g., 2009), as well as numerous critical historians of media and technology (e.g,, Hilmes 2012; Douglas 1987; Smulyan 1994; Starr 2004), Freedman explicates how little about the shape of media is inevitable:

> Media systems do not emerge spontaneously from the logic of communication technologies, or from the business plans of media corporations, or from the imaginations of creative individuals… [M]edia systems are instead purposefully created, their characters shaped by competing political interests that seek to inscribe their own values and objectives on the possibilities facilitated by a complex combination of technological, economic and social factors. (2008: 1).

This struggle plays out in the policymaking process in various ways that might not seem overtly political when viewed through the antiseptic gloss of "policy science"— the terms used to describe the issues, the operational definitions used in regulations, even (perhaps especially) those things that go unsaid within the proceedings. Upon closer examination, however, what appear on the surface to be mundane details reveal their consequential nature underneath.

Seeing and understanding the politics of media policy, and the power relations that characterize them, takes looking through a critical lens. Whose interests determine political choices about the shape of media systems— which possibilities are enabled and which constrained— is dependent on the uneven structures of influence within the policy sphere, paralleling those of society generally. Within critical studies, this assertion is entirely uncontroversial, but inquiry along these lines is largely out of bounds within the dominant paradigm of administrative approaches to communication (see McChesney 2007) and the typical approach within law, economics, and political science that reductively instrumentalizes policy.

A critical approach to media policy has, however, made some headway in the fields of

communication, law, economics, and political science since the 1990s, most prominently through political economy. The political economy of communication (PEC) tradition (see Mosco 2009) has had the most impact on critical studies of media policy, rising out of foundational critiques like C. Edwin Baker's (2002) and led in particular by Robert McChesney (e.g., 2004). The PEC approach is an important antidote to understanding the reliance on neoclassical economics in policy analysis, with a keen eye towards the politics of policy and a consistent injection of power into the equation. PEC tends to figure the politics of media policy as a matter of "corruption," a perversion of the system as it is meant to work that comes at the hands of large corporations and the super-rich. When it comes to media policymaking, this is often figured as a matter of "regulatory capture," when regulators end up acting in the interest of those they are meant to regulate, not the public interest (see, e.g., Pickard, Forthcoming). Media policymaking is affected by the growing influx of money in politics overall, both a cause and effect of the concentration of wealth and increasingly unchecked corporate control that defines the neoliberal era. A hybrid framework of political economy and critical cultural studies has been at the base of the recent rise of critical media industries studies (CMIS) (Holt and Perren 2011; Havens, Lotz, and Tinic 2009). Media policy is rarely an extended focus in this work, however, as most of CMIS is concerned with "production cultures" (Caldwell 2008; Mayer, Banks, and Caldwell 2009; Johnson 2013) and/or "creative labor" (Hesmondhalgh and Baker 2011; Mayer 2011; Curtin and Vanderhoef 2014) within media industries. Notable exceptions like the work of Jennifer Holt (2012) consider how media policy results from political pressure for deregulation and structures the relations between and among industries as part and parcel of corporate strategies of concentration. Net neutrality has been explored from PEC and CMIS approaches, with the former tending to factor it as part of a larger media reform cause (e.g., McChesney 2013;

Meinrath and Pickard 2008) while the latter looks at how it plays into industrial arrangements between providers of content and conduits (e.g., Holt 2014; Tussey and Sanson 2011).

These pure and hybrid forms of political economic analysis are very valuable— indeed, much of my research takes place within the paradigm of critical media industries studies— but political economic methods are not enough on their own to capture the full complexity of media policy. The structural inequalities in access to material resources contributes very strongly to the resulting policy serving the interests of corporations and elites, but power in the policy sphere (as with power generally) is not wholly economically determined. It is not as simple as regulators being bought off; influence cannot be reduced to a quantity of money spent on donations and lobbying. David Hesmondhalgh (2005) argues that a view of policymakers merely doing the bidding of wealthy individuals and corporations oversimplifies the dynamics operative in media policy. To begin with, power is not about directly buying results, nor is policymaking a finely tuned automated machine that unfailingly delivers outcomes in the interests of the powerful. Policy is made by actual human beings, who actively choose their course of action and— although deep cynicism about policy is certainly understandable— the majority of government officials truly believe that what they are doing is serving the public. Rather than coming from the marching orders of some corporate overlords, the exercise of power over policymaking is often more about shaping the sense of what is best to address a given issue— or at least what is possible or practical within given ideological constraints. With this in mind, then, it is not enough for critical studies of media policy to just 'follow the money' and stop there. An understanding of the political economic structures of policymaking is necessary but not sufficient.

In order to get at the more subtle and nuanced operations of power in policymaking beyond

economic determinism, it is necessary to understand media policy discursively. Media policy is structured not only by unequal access to material resources, but also by inequality in discourse. Even when it comes to applying influence by spending money, discourse is crucial: for instance, a corporation can buy access to policymakers, but how influence operates is still dependent on what is said once they have a decision maker's ear. What are the ideas that get expressed, in what terms, that hold sway over those making the rules— and why? These questions are not only more interesting than how much was spent to create that relationship, but, as a matter of actual political practice, can also reveal the points available to intervene. Which courses of action are preferable, or even possible, are shaped by the particular ideologies underlying policy— what understandings of the given issue are normalized and what understandings are marginalized— so that means that shifting or expanding the dominant discourse in the policy sphere can open up possibilities for change. Critical approaches to media policy that examine policy discourse can illuminate those discursive resources and strategies that animate people and can become inflection points for organizing people and building movements. With this understanding of politics— that power does not equate only with money, but also with language, symbols, and the embodied deployment of their messages— we can perhaps move beyond a defeatist sense that an unjust future is already bought and paid for, and begin to exercise the power we have when we come together and act for something better.

This complexity of the politics of media policy can be seen clearly in the context of net neutrality. It was a very positive development that the FCC adopted Open Internet regulations in 2010— as we will see in Chapters 2 and 4, it was a step in the right direction made possible in a real way by popular support collected around the principle of net neutrality and the ways it was channeled by advocacy groups into more palatable discourse to circulate in the policy sphere.

However, as with so much in politics, the devil is in the details: we will see in the analysis of the Open Internet rules and the particular terminology deployed in its text in Chapters 3 and 5 how the power relations that favor the major corporations involved in the debate, at the expense of the public and even the survival of the rules themselves, were already embedded in the very language of the policy.

My research is grounded in history and political economics but I primarily apply discursive methods of policy analysis. My understanding of discourse is based in the theories of Michel Foucault, where "discourse" is used to refer to language as it operates in use and accumulates into particular patterns of interaction— our ways of identifying, classifying, thinking about, talking about, and acting towards topics and situations (1981, 1990, 2002). The interconnected habits of talk and action that Foucault calls "discursive practices" add up to constitute certain "discursive formations" at various conjunctures— as a function of discourse, these formations appear as natural properties of that which is being described, but they are, in actuality, socially, culturally, and historically contingent (1990, 2002). Discourse analysis involves not just looking for broad cultural trends within discourses, but closely examining the consequences of these discursive formations for structuring social relations and institutions.

The dynamic of discourse theory that I am most interested in for this research is the process of "discursive construction." As held by Foucault and those who undertake discourse analysis, language, actions, and practices that become associated with a particular matter work to form the matter itself— the way that we talk about issues can end up shaping the way we think and act on those issues. Words matter, that is, because the terms we use to describe something delimit the sense we make of it and its potentials. As Williams' focus on "keywords" shows (1976) specific terms carry power in society, with consequences for the way the cultural and political tensions

inherent in their definitions get applied— and I argue this includes keywords in the media policy sphere. Stuart Hall (with Grossberg 1986) explains how despite its always-transitory nature, discursive formations come together in particular times at particular sites to suggest stability and coherence. Hall explains this process of discursive construction as depending on "articulation:" the linking of elements of a discourse to elements of other discourses (with Grossberg 1986). Hall uses articulation to describe how power concentrates within certain discursive formations to serve specific interests in a discourse. Within discursive construction, it is through the process of articulation that terms become linked to discourses and thus take up contingent yet particular meanings, enabling diverse groups to come together in a kind of discursive alliance based on these constructed meanings. Following Hall's intellectual legacy, discourse analysis is a widely used methodology in media and cultural studies (1980, 1982), but the technique is most commonly applied to media texts and other artifacts of popular culture, not policy documents or regulatory proceedings. That has begun to change in recent decades, though, as the influence of cultural studies spills across the disciplinary boundaries of the humanities and as a part of the 'interpretive turn' in qualitative social sciences.

Discourse analysis of policy has begun to gain traction in media policy studies in recent decades. This has been led in particular by Streeter's trailblazing work on discourse in broadcasting, cable, and internet policy (1996, 1997, 2010). Discourse analysis of media policy has also been taken up by scholars such as Becky Lentz (2011, 2013) who approaches discourse less from a "culturalist" than from a "structuralist" (Hall 1980) frame, and can also be seen in certain work within the PEC tradition as exemplified by Freedman (2008). While discourse analysis shares some features with traditional methods of policy studies such as legal analysis— including the close examination of language and meaning as they circulate in policy texts and

processes— most of the points on inquiry for discourse analysis are the unexamined assumptions for legal studies. For instance, the clear singular definitions of terms that are agreed upon before even entering the policy arena are problematized from a discursive approach. For reasons such as this, Streeter asserts that discourse analysis represents not only a useful critical lens through which to understand media policy, but also a deeper challenge to some of the fundamental tenets of the policymaking process that mask its underlying politics— for instance, discourse theory questions the very ideas of neutrality and objectivity that underlie the "policy science" orientation (2013). Streeter's work serves as a model for my approach to media policy, in particular in how it points to the power of discursive construction at the FCC as a "legal inscription on technology:" in classifying, defining, enabling, and constraining the uses, practices, and possibilities of communications media in the US, FCC discourse shapes technologies it often fails to describe (1996). Streeter's critical studies of FCC broadcasting and cable policy (1996, 1997) provide great insight into the structuring power of regulatory decisions, as well as recognizing the values and principles that underlie and inform policy decisions and the conflicts and contradictions inherent to the politics of policy.

Regulatory policy is an especially important site for discourse analysis. FCC policy can be seen as a prominent site of dominant discourse that involves what Hall (1986) calls the "politics of signification:" the ideological power to signify events in a particular way and the resulting power to create collective understandings of them. Therefore, the "definition of the situation" (Thomas 1970) that is instituted in the policy sphere for a still emerging technological system like the internet plays a significant role in determining its future development and use. The meaning encoded in policy for a medium must ultimately be decoded by its users, but resistance is made particularly difficult by the concrete transformations and legal limitations put on

technologies by regulation. Discursive construction has great implications for people's conceptions for possible action and this is only further exacerbated by the existence of policy as a "technology of power" as Foucault described it (1991)— a form of governmentality that can bring into existence the social relations it asserts. Discourse in policymaking processes operates from a privileged position within the apparatus of the state, with a concentration of discursive power backed by strong disciplinary force. The social position of the policy sphere means that discourse there holds a unique authority and influence in shaping important social structures, including technological systems. Of concern here, discourse that plays out at the level of the FCC has an especially powerful role in constituting the institutional and technical structures of communications in the US, including the internet. Further, Foucault draws attention to how discursive power is not equitably distributed in society (2002) and this also intensifies at the level of socially structuring institutions like the government. For instance, large corporations enjoy greater access to policymakers, in addition to the material resources necessary to influence them. Beyond this, the lines of policy discourse considered legitimate are constrained by the "interpretive community" (Fish 1980) of the policy sphere (Streeter 1996). Streeter identifies two types of discursive approaches to media policy— what he refers to as "demystification" and "social construction" (2013).

The "demystification" tradition is associated with political economic analysis, where discourse tends to be seen as a tool of legitimization of market relations. From this perspective, policy discourse is understood as a form of "false consciousness," a Marxist conception where language is used strategically to cover up or distort reality. Such an approach typically proceeds by looking closely at particular messages to uncover the underlying assumptions and provide alternative explanations that reveal a hidden truth. This perspective helps shed light on the ideas

that channel influence in the policy sphere, as part of deeply-embedded ideologies underwriting policy that works to concentrate power. In the context of media policy, a series of powerful ideologies that have been effectively critiqued from a discursive approach include neoliberalism (McChesney 1999; Hesmondhalgh 2002, 2005), deregulation (Horwitz 1989), corporate liberalism (Streeter 1996), and romanticism (Streeter 2003, 2010). Demystification of discourse played an important role in early critiques of neoliberalism, technological determinism, and scientific positivism in information and communication policymaking (Slack 1984; Peters 1988; Streeter 1983; Mosco 1989). Demystification further informs perspectives such as Philip Napoli's analyses of the "foundational principles" of communications policy and how they have become twisted (2001), theorizations such as Victor Pickard's notion of "discursive capture" of media regulators (Forthcoming), and especially Freedman's work on ideological struggle within policymaking processes (2008).

The demystification approach has been effective at illuminating the workings of neoliberal ideology in media policy. Freedman's analyses in particular depict how media policy in the US and UK might be prescriptively liberal pluralist, but is descriptively neoliberal: despite claims to open, wide-ranging, informed democratic debate, the policymaking process actually operates on exclusionary and unequal terms of corporate representation and has resulted in undemocratic policies of privatization, deregulation, and austerity (2008).[1] Freedman's view of the influence of neoliberal ideology in media policymaking is helpful in understanding the case of net neutrality.[2] We will see throughout this dissertation that neoliberal discursive formations including free markets, individual rights, personal choice, small government, and self-regulation pop up again and again— on both sides of the issue, a demonstration of just how much neoliberalism is the 'common sense' of the day. Deregulation, as with so many issues related to communications and

media policy (Hesmondhalgh 2002; Horwitz 1989), has been particularly key to the net neutrality debate, especially as it intersects with concepts of free speech, technological innovation, globalization, and the information economy that have all served as pressure points for the removal of government intervention. The concept of 'deregulation,' however, oversimplifies the issue: there is no such thing as true 'deregulation' (behavior is always regulated by a combination of social, economic, and material forces not limited to law alone, as Lessig 1999 shows) and the matter is better described as "re-regulation" (Murdock 1990) where the state does not remove rules so much as write new ones to protect private interests over public values. Nonetheless, the idea that net neutrality is best left to the telecommunications industry to self-regulate is a common refrain among net neutrality opponents— even if those pushing self-regulation attempt to articulate this discourse to the admirable project of multistakeholder global internet governance (see Mueller 2010). The reality thus far in regard to net neutrality has been private arrangements negotiated among the biggest corporate players with the exclusion of any government involvement or public interest.

Demystification is the discursive approach informing Freedman's formulation of "media policy fetishism" (2014). Related to the Marxist conception of "commodity fetishism," Freedman forwards "policy fetishism" as the process through which media policymaking is decontextualized, naturalized, objectified, and disconnected from everyday people's concerns, to the point of perverting the system as it is meant to work (2014). Of the many ways that Freedman indicates that media policymaking is fetishized, there are three that are particularly relevant to my analysis of net neutrality.

First is the evacuation of meaning from specific policy terminology: drawing from Napoli's excavation of the foundational principles of communications policy (2001), we can see

that ideas like freedom of speech, the public interest, diversity, and universal service have become empty signifiers now being employed to serve interests entirely detached from their historical and theoretical context. For this reason there are many valuable discursive interventions to be made along Inigo Montoya lines ("You keep using that word. I do not think it means what you think it means." *The Princess Bride* [1987]). One of the most common discursive strategies to cloak the partial interests of policy is to wrap it in widely held public values like the foundational principles of communications policy that Napoli identifies, so it is very typical to see policy labeled in terms that describe the opposite of what it enables— the FCC's Open Internet rules are a great example of this— which makes it important to understand the principles in play and hold policymakers accountable to the values they assert with them.

Second, policymaking shows an obsession with evidence— and quantifiable evidence in the form of data and metrics that lend appearances of objective "policy science." While having actual empirical support for the arguments being forwarded and the decisions being made is an important reasonable way to proceed, the practical effect of this as it is actually implemented in practice is to exclude those whose discourse does not fit within the confines of the policy arena, especially that which is not translated into quantitative economic terms. And, third, is the related exclusion of meaningful public participation in the policymaking process. As we will see with the Open Internet proceedings, especially in Chapter 3, even when public engagement with the policy debate is high, people are not able to intervene on their own terms, but must have their messages brought to the official policy sphere for it to be recognized by the FCC, often through a sort of representation where advocacy groups speak for the people.

This sort of demystification of discourse is useful for digging up the unspoken assumptions of policymaking and exposing hypocrisies to make trenchant political critiques, but could go

further to account for the full weight of the power of language and how it is used. That is, we must recognize that discourse is not symbolic alone, as in merely representing or misrepresenting some actual truth that occurs elsewhere— rather, language is itself constitutive of social relations. As formulated in Foucauldian discourse theory (2002) and Williams' cultural materialism (1991), discourse does not simply follow from material relations but, in fact, is a crucial site for the reproduction of those relations. Therefore, discourse analysis should not merely explicate disjunctures between discourse and reality but should examine how discourse shapes reality. As Streeter (2013) argues, discourse analysis can be a method for understanding how social practices and institutions come into being and, perhaps, how they can be constructed differently (2013). This leads us to the second discursive approach identified by Streeter (2013).

The "social construction" tradition is associated with critical cultural approaches that view discourse not just as justification for market relations but as a means to actually create market relations. From this perspective, policymaking is understood as a cultural practice that cannot be reduced to economics or material power relations alone, as it also involves complex struggles over meanings and values. Such an approach examines policymaking within social, cultural, and historical context in order to understand the role of policy discourse in shaping the practices and institutions involved. These notions of "social construction" play into related work in cultural policy studies (Bennett 1991; Lewis and Miller 2003) and the social construction of technology (SCOT) (Bijker, Hughes, and Pinch 1987; Bijker and Law 1992; Douglas 1987), as well as in the 'critical discourse analysis' tradition (Lentz 2011, 2013; Van Dijk 1993; Livingstone, Lunt, and Miller 2007). Most relevant for my approach in this dissertation is work on the role of discursive construction in media policy in constituting the technical systems of media, such as from Paul Edwards (1997) and Jonathan Sterne (2012), but most explicitly theorized in Streeter's work as

"legal inscription on technology" (1996: 21).

Understood this way, we can see the crucial ways in which media policy discursively constructs the technologies, institutions, and practices of media systems— as Streeter puts it, discourse can "create that which it purports to describe" (1997). How media are defined, classified, and discussed in and around the policy sphere— regardless of these depictions' relation to some truth— structures the sense that can made of them and, therefore, what those media are, who they are for, and what they can be. The dominant discourse surrounding policymaking creates expectations, norms, and relationships that become a self-fulfilling prophesy. As I argue, in the case of net neutrality, the fluid power of discursive construction need not be only a means of domination but can also be used in the service of democratic ends.

In this dissertation I take up the methodology of discursive analysis of media policy that follows the social construction model laid out by Streeter (1996, 1997, 2013). I employ the methods of discourse analysis in my research to the discursive formation of 'net neutrality' in order to sketch an intellectual genealogy of the principle, understand its articulation to various political, economic, and technical discourses, and the work it performs in influencing policy decisions and relations of power. In particular, I focus on the terms 'network neutrality,' 'net neutrality,' 'open internet,' and 'internet freedom'— in addition to language that historically and conceptually underlies the discourse of net neutrality, including 'information,' 'telecommunications,' 'common carriage,' ' and 'nondiscrimination.' I follow these terms through policy proceedings including reports, orders, briefs, hearings, filings, and comments at the FCC, Congress, and the courts; academic literature such as articles and papers in technical and legal journals, books, and conferences; reports, statements, and commentary in the press, trade journals and blogs, and from involved corporations and interest groups; and sites and

forums of popular discussion online such as social media platforms like Twitter and Reddit. By tracing a breadth of discursive practices across these various sites where these terms are used, I map the shades of meaning across these different discursive formations, their shifts over time, and, situating it within historical and political economic context, work toward understanding the role 'net neutrality' plays in the politics of media policy.

There are four particular dynamics evident throughout my analysis of net neutrality that discourse analysis helps explicate. The first comes from polysemy in policy discourse. The multiple meanings and shifting connotations that exist for particular terms enable discursive alliances to come together but require translations, negotiations, and deep compromises in changing contexts (Gangardahan 2013a, 2013b), as we will see in Chapters 2, 3, and 4 with the case of net neutrality discourse. The second has to do with the arcane terminology in media policy discourse. Discourse in regulatory policy functions to exclude participation from outsiders through its tedious and jargon-filled nature through a strategic deployment of "boring" (Lentz 2009) that obscures the crucially political choices being made on behalf of people with little understanding or engagement, as we will see in Chapters 3 and 4. The third is about definition and classification as powerful acts of discursive construction. A major part of Foucault's classic discourse analyses (1981, 1990, 2002) is how classifying phenomena is an exercise of great power to constitute new institutional arrangements and— as we will see in Chapters 3, 4, and 6— this comes with especially great consequences when these classifications are established in formal legal rules. The fourth concerns not what is said in policy discourse, but what is unsaid. The discursive gaps where certain matters stay off the table and yet others disappear from the conversation are what Freedman calls "policy silences" (2010) and the most notable silence for net neutrality discourse is a glaring absence of 'net neutrality' itself: as detailed in Chapter 2 and

4, all official FCC proceedings persist in using the phrase ‘open internet’ in place of ‘net neutrality,’ which speaks to the effectiveness of the latter as a discursive formation that imports into the policy sphere a bit too much democratizing energy to be comfortable to the corporations that dominate the discourse there.

Net neutrality is a significant topic of analysis because not only has it been a hot button issue that proves particularly suitable to examine the power relations at work in media and communications but also the discourse of ‘net neutrality’ is a unique site of instability within policy discourse which presents political opportunities. Undertaking discourse analysis can expose those moments where dominant discourse— the hegemonic ‘common sense’ of a matter— has become unstable and is therefore vulnerable to re-articulation in the service of meaningful political change. Streeter asserts that net neutrality is one of the most important of those means of intervention and, in studying net neutrality discourse and its role in shaping media policy and institutions, this dissertation answers his call for more scholarly work focused there (2013). The net neutrality debate has cracked open previously hardened frames of media policy discourse with the introduction of a new set of tropes regarding fairness and equality that have proven to vitalize engagement (Kimball 2012). Conceptions of ‘neutrality’ that in media policy were previously limited to associations with objective technocratic expertise in policymaking or antitrust intervention on behalf of open competition in the marketplace shifts with ‘net neutrality’ discourse that forwards a vision of fairness and equality in the technical and institutional structures of the network itself (Streeter 2013).

There has been a substantial amount of scholarship on net neutrality (see Chapter 2), but virtually all of it takes mainstream legal, economic, and/or technical approaches and little has deliberately considered net neutrality discursively. The mainstream work contributes to the

discursive construction of net neutrality, fleshing out the principle and its application in policy and practice, and as such figures into this dissertation as very useful background. There is a bit of a critical streak in some of the law scholarship that considers net neutrality as a freedom of expression issue, of which work by Susan Crawford (2009, 2013), Dawn Nunziato (2009), Marvin Ammori (2009, 2012), and Jack Balkin (2008a, 2008b) has proven valuable to the perspective developed in this dissertation (see Chapters 3, 5, and 6 in particular). A discursive approach to net neutrality has begun to show up in some work in communication and media studies scholarship. Especially helpful is the work tracing the prehistory of 'net neutrality' discourse back to the generations of common carriage regulation, the FCC Computer Inquiries of the 1960s-1980s, and elsewhere, coming in particular from Lentz (2011, 2013) and Peter Schaeffer (2013). Also notable is an edited collection from Zack Stiegler (2012) that includes discursive approaches to net neutrality, most explicitly applied in a historical genealogy of the principle of net neutrality (Kimball 2012) that will look familiar to readers of Chapter 2.

Some of this work alluded to above points to ways in which 'net neutrality' is an inexact and limited way to talk about the issue, but it nonetheless does important discursive work. Most obviously, there is no such as true 'neutrality,' with no discrimination whatsoever— as many have shown, even net neutrality ultimately cannot avoid favoring some uses of the network over others (Sandvig 2006; Frishmann 2012; Bauer, Clark, and Lehr 2009; van Schewick 2010). In deploying rhetorical shorthand along these lines, net neutrality discourse can perpetuate notions of a "level playing field" in ways that are problematic (Perlman 2010). Also, net neutrality in many ways is just a shiny new gloss on a dusty old principle— as we will see in Chapter 3, and as has been pointed out by many (e.g., Lentz 2013; Sandvig 2007; Crawford 2009), net neutrality is just a revival of the common carriage tradition. Further, many of the arguments for net

neutrality fall back on the openness of historical internet architecture as proof enough that that should be the way in the future too (e.g., Lemley and Lessig 2000), which can lean too heavily on appeals to tradition. Too much focus on net neutrality as it relates to network architecture—particularly in its relation to the 'end-to-end principle' (Gillespie 2006; van Schewick 2010)—also risks presenting the issue as one that can be resolved by clean technical means, a tactic that absolves the public responsibility for a policy solution that such a social, and not wholly technical, problem necessitates (Gillespie 2007; Lessig 1999; Vaidhyanathan 2011). Even with all of these points taken, though, it is important to remember that as it functions discursively, 'net neutrality' holds power relatively autonomous from the conditions of its material reality.

What matters more is that 'net neutrality' has been taken up by people in ways that have facilitated legitimate progress toward the democratic conditions that it means to describe and, even if not yet realized, it represents a vehicle on which to proceed. As Streeter puts it, "[N]et neutrality *as a discourse* has some unique potentials. As an abstract concept[…] it may not be all that new, but as political poetry, it is new; it has teeth" (2013: 497; emphasis in original). Regardless of whether there is actually existing net neutrality, 'net neutrality' resonates in a way that has promise to help get there. It is instructive to see net neutrality as part of the romanticized cyber-utopian discourse shown to be so influential in shaping the internet. As Fred Turner (2006) and Streeter (2010) show, the idea that networked personal computers can be a democratizing force, while in ways troublingly linked to libertarian and neoliberal ideologies, has nonetheless played a large role in the design and development of the internet along lines that are actually more democratic than previous technical systems of communication. The internet is a relatively open system not because of anything inherent in the technologies themselves, but because open and democratic practices have come to be articulated to those technologies via discourses of

openness like ‘net neutrality.’ Streeter puts it very well here:

> One of the most powerful forces maintaining the internet’s open, anarchic character, in sum, is our memory of all the romantic stories about the internet; those stories taught us to expect the internet to be liberating and unpredictable, and that expectation helps keep it that way. The internet is open, not because of the technology itself or some uniquely democratic potential hidden inside the technology, but because we have narrated it as open and, as a consequence, have embraced and constructed it as open (2010: 175).

From this perspective, we can see net neutrality discourse as politically valuable because it plays a strong role in carrying the narrative that the internet is an open and democratic technology, which— even if that is only part of the story— is so much a part of the work of making it as much that way as possible.

Continuing to articulate this vision of ‘net neutrality’ and sustain it as a principle to inform the policies and practices of internet governance and usage is discursive construction that can be used in the service of more fair and equitable structures of media and communication. Especially as actual net neutrality is being actively eroded by those corporations that own and operate the physical infrastructure of the network— and, therefore, also dissolving net neutrality as a shared norm and expectation among internet users— it is clear, though, that policy is an utterly crucial site for this discursive construction. Using the power of policy discourse to shape the technologies it defines and regulates is essential to achieving meaningful net neutrality protections. As a recognition and enlistment of the power of regulation of and through technology (Gillespie 2007; Lessig 1999), net neutrality policy can also be a means through which to legally build into the infrastructure of the internet the public values of fairness and equality that can enable more democratic structures of access to and participation in media and communications. Let us turn now to just those issues of technologies and infrastructure.

Net neutrality and/as internet infrastructure

In addition to policy, this dissertation is also crucially about technology. I am centrally concerned with internet technology, but what is considered here is not the same set of technologies explored in software studies, critical code studies, and other fields of internet studies. Rather, my focus here is on the technological systems lying underneath— I am interested in infrastructure. This approach to technology should be understood within the growing body of work that has come to be referred to as 'infrastructure studies.' In fields including communication, media studies, information studies, law, and economics, attention has turned to infrastructure in increasingly prominent fashion— with surprisingly little engagement across scholarly boundaries and with often different understandings of what 'infrastructure' means.[3] In spite of the vagueness and inconsistency with which the term is employed, Sandvig— who is the most prominent exception to the lack of engagement across these fields— suggests that 'infrastructure' is nonetheless galvanizing a vibrant new multidisciplinary body of scholarship, especially in regard to the internet (2013).

I take infrastructure studies not merely as an academic field demarcated by its object of study, but as a research method in itself: to dig deeper into the material and relational functioning of various foundations for modern life, not just to explain how they work but to uncover the often hidden consequences of their shape for the society in which they are embedded. My research here seeks to, in line with the project of infrastructure studies that Sandvig identifies as it is applied to the internet, "contribute new ways to unpack the Internet's complexity and to enroll the guts of its operation in future scholarly arguments about the Internet and society" (2013: 26). Going forward, I will use the term 'infrastructure' with both the conventional meaning of those systems that are foundational to modern society (in the sense of essential public utilities like electricity, roads, and telecommunications) and in reference to the broader

concept of infrastructure as "shared means to many ends" (Frischmann 2012: 4). My argument will operate from the definition of 'infrastructure' as "pervasive enabling resources in network form" provided by Geoffrey Bowker (et al. 2010: 98) and focus on the particular sense in which Brian Larkin discusses infrastructure as "the material forms that allow for exchange over space" (2013: 5).

This dissertation considers both internet infrastructures and the internet as infrastructure. Before tracing these two perspectives and the way my approach to net neutrality draws from and adds to work in infrastructure studies, I will briefly discuss this meta-infrastructural dynamic as it relates to the internet. Following the influential work of science and technology studies scholar Susan Leigh Star (e.g., 1999, 2000), it is important to acknowledge the impossibility of making any clean separation between the material and social components of technology; it is also key to understand how any technology depends upon other technologies to function. Every infrastructure, then, both has an infrastructure and itself serves as an infrastructure. The internet provides an especially clear example of this dynamic. What most people call 'the internet' is actually a complex interrelated interconnection of modular components that enable the whole system to function, seen most clearly in the layered architecture of the internet that distinguishes between and explains the interdependence of the physical, logical, application, content, and social elements of the network.[4] The technologies that enable the internet are 'internet infrastructures' (which I typically use in the plural in acknowledgement of its multiplicity). But the internet is also itself an infrastructure for a wide variety of social, cultural, political, and economic practices— all of the internet infrastructures that underlie the network become themselves the installed base upon which these activities depend. 'The internet as infrastructure,' then, is a technology that enables. These two conceptions of internet infrastructures and internet

as infrastructure, and the way they are applied to my analysis of net neutrality, are further fleshed out below.

Internet infrastructures are those technologies that enable the network to function. The most crucial infrastructural resources for the internet are the two deepest layers of the network architecture mentioned above— the physical and the logical, or what I will be referring to as 'material infrastructure' and 'information infrastructure' (drawing from the language of infrastructure studies in lieu of that from network engineering). The material infrastructure of the internet includes the copper telephone wires, coaxial cable lines, fiber optic cables, cellular towers, satellite dishes, and electromagnetic spectrum that make up the access networks; the fiber optic trunk lines of transit and backbone networks; and the routers, switches, servers, and data centers that host and transmit online content and communications. The information infrastructure of the internet includes the standards, protocols, norms, databases, software, and code that are critical to the internet, most prominently including the TCP/IP (Transmission Control Protocol/Internet Protocol) protocol suite and the Domain Name System (DNS). The issue of net neutrality— and therefore my analysis in this dissertation— concerns the operation of the material infrastructure of the internet. Having an understanding of the internet's information infrastructure in addition to material infrastructure, though, is important not just for a full picture of internet infrastructures, but also in regard to two different perspectives within infrastructure studies. Sandvig (2013) refers to the two most prominent groups studying internet infrastructures as the "relationists" and the "new materialists."

The relationists analyze infrastructure not as a set of things but as a set of social relations. The relationist approach is most closely associated with work addressing information infrastructures, especially as developed by Star and Bowker (Bowker and Star 1999; Star 1999;

Star and Bowker 2006; Star and Ruhleder 1996). It can be seen as revealing the sociopolitical implications of the information infrastructures of the internet in work on network protocols (Galloway 2004; Galloway and Thacker 2006), DNS (Mueller 2002, 2010), architecture design principles (Sandvig 2006a, 2006b; Gillespie 2006), and online algorithms (Gillespie 2014). Early relationist approaches, though, come from work on infrastructures as large technical systems (Hughes 1983, 1989, 1998; Sawhney 1992, 1993, 2003), part of modern urban development (Graham and Marvin 1996, 2001; Winner 1986, 1993; Castells 2000), and within actor-network theory (Latour 2007, 1987). The relationists, who come primarily out of science and technology studies (STS), are characterized by taking topics assumed to be technical and showing how they are actually cultural.

The new materialists, who come primarily out of media and cultural studies (MCS), do the opposite: taking topics usually seen as cultural and getting into the technics. The new materialists investigate the infrastructure underlying communications, in a move to ground the cultural approach to media within concrete conditions of materiality, spatiality, and technical workings. The new materialist perspective is most prominently present in the "populist approach to infrastructure" of Lisa Parks (2009, 2011) and Jonathan Sterne's "format theory" (2012), but its roots can be found in Harold Innis' concerns for how the material forms of communication enable and constrain the dissemination of knowledge (1950, 1951). Focusing too much on material infrastructures brings with it a risk of reductive technological determinism, but the new materialists come from the lineage of Williams' cultural materialism (1974), which foregrounds the interrelations of media as technologies and social forms. In this way, new materialism is best understood within the integrated approach to media that is foundational to the MCS tradition (D'Acci 1992, 1994)— we can see infrastructure being added as a site of the circuit for a full

consideration of media. New materialist analysis has been productively brought to the material infrastructure of the internet in work on backbone networks (Starosielski 2011a, 2011b, 2012; Blum 2013), transit networks (Braun 2014; Tussey and Sanson 2011), wireless networks (Sandvig 2011) and data centers and edge networks (Sandvig 2006b; Holt 2012, 2014). Sandvig characterizes the new materialist perspective as part of a turn away from unmoored postmodernist excesses in critical cultural theory (2013). However, new materialist work is best understood not as a backlash against big-T Theory, but rather as a corrective to popular misconceptions regarding the 'dematerialization' of media that have accompanied the proliferation of digital technologies (seen, for instance, anytime anyone describes the core of internet infrastructure as merely 'the cloud'). Drawing from the heuristics for infrastructure studies laid out by information scientists Stephen Jackson, Paul Edwards, Cory Knobel, and Bowker (2007), I would like to point out two particular dynamics of internet infrastructures that especially inform my analysis of net neutrality: infrastructure's invisibility and its dependence on human actions.

Infrastructure is typically so deeply embedded in society and taken for granted as to be invisible. Sandvig notes,

> Nowhere is this rule of invisibility more true than the Internet, whose major physical parts are often literally invisible: they include wireless signals, buried wires (e.g., fiber optic lines) or machines hidden in nondescript, locked office buildings (e.g., data centers and Internet traffic exchange points). Yet beyond its material components, the idea of the Internet is also invisible, with Web pages arriving as if by magic, relying on processes that are totally unknown and unquestioned by most Internet users (2013: 17).

The entirety of internet infrastructure is in this way a "black box" in the way STS discusses it (e.g., Latour 1987; Pinch and Bijker 1984), meaning that the structural power that comes with the shape and operation of this infrastructure is erased not just from public intervention but even basic understanding. The STS theories of Langdon Winner (1980, 1993) and Bruno Latour

(1987, 2007) most fully capture the political consequences of such materiality: the affordances made available through infrastructure shape possible action, a form of power exercised not through obviously social means but delegated to the hidden workings of technical systems. Following this to the case of the internet, as explained by Tarleton Gillespie (2007) and Lawrence Lessig (1999), the design and management of the network's material and information infrastructures is a site of control— an indirect form of regulating actions that is removed from processes of public decision-making and naturalized by virtue of being embedded within the technical structures themselves.

In light of this willful erasure of internet infrastructures from public visibility, and the power relations this conceals, simply explaining how the internet works can be itself a political act. The spread of public awareness and understanding of internet infrastructures, that is, can be a bulwark against the power that comes with control of network architecture— people must first 'pay attention to the man behind the curtain' before they can even ask in whose interest he is working his magic. This is in line with a major project of infrastructure studies— what Parks calls the "politics of infrastructural intelligibility" (2011: 81)— to make visible the invisible, to show the materiality of the presumptively immaterial. Along these lines, Star (1999) and others point out how moments of breakdown are opportunities for such intervention: it is usually only when infrastructure ceases to function properly that any attention is paid to it. The debate over net neutrality represents one such moment of opportunity that I seek to build on. Introducing into the operation of internet infrastructure a greater degree of discrimination and control over traffic— a breakdown from what had been taken for granted in the functioning of the network from users' perspective and that has occurred based on network operators' assumptions that no one is noticing what they do — has led more to think about how the internet works— or does not

work, or should work. This is a palpable, yet decidedly still small shift— there is still a long way to go, including within media studies, for there to be meaningful understanding of how the various parts of the internet actually work. As a symptom and cause of this ignorance of internet infrastructure, most technical explanations of net neutrality remain sequestered within the bounds of technologist and legal circles, with few translations to fields like media studies. Toward this end, then, in my research I draw from technical literature that circulates in the fields of network engineering, computer science, and telecommunications trade and policy circles to explain how internet infrastructures work— particularly related to the wired and wireless broadband access networks explored in portions of Chapters 3, 5, and 6.

Infrastructure, while most obviously technical, is also crucially dependent on human actions. In particular, infrastructures are arrangements and aggregations of practices and choices— and not just those involved in the initial invention and development of the technologies involved, but also in the management and regulation of the technical system. The decisions made across these realms are political decisions— for they shape the infrastructure and the possibilities it makes available to all of its users— yet they are too often cloistered away from meaningful public participation in the technocratic realm of technical and legal experts— if, that is, in the face of increasing neoliberal private operation of supposedly public infrastructure, they are open to intervention from anyone outside corporate boardrooms at all. In tracing what he refers to as the "momentum" of large technical systems over time, STS historian Thomas Hughes (1983) shows how the early decisions of how to build and operate infrastructure networks tend to be reinforced as other technologies and practices come to depend them. This technological inertia, typically referred to "path dependence" (David 1985), shows how early design and development choices become entrenched in the shape of technical structures in ways

that become difficult to deviate from.

Path dependence and momentum are why the early decisions made about technologies— especially pervasive and essential social resources like infrastructure— are so important for critical study and intervention, as they come with long-lasting political consequences. As any infrastructure fundamentally dependent on human action, the internet is as much as anything a series of coordinated agreements between the operators of the various interconnected elements that have been congealed in the technical workings of the network as a whole— what Latour would describe as an achievement of negotiations among disparate parts and actors, both social and technical (2007). The norms of these agreements are beginning to shift, however, as net neutrality erodes, which makes it a pivotal point for examination as the internet has not yet reached the point of momentum. Internet media are still emerging and are not yet stabilized in form and practice, making the battle over net neutrality hugely consequential for the shape they will take over time, especially as the outcome becomes solidified in path dependent policy definitions and industrial models. The political consequences of governance decisions are what makes internet infrastructure such a pivotal point of intervention for critical scholarship. For all of the importance of technical education or an expository history of this moment, it is not enough to merely describe the workings of internet infrastructure or document the change in its architecture and management. Instead, scholars of internet infrastructure, consistent with the critical infrastructure scholarship of those like Star and Parks, ought to make critical evaluative claims about such issues— not just explaining the shape of infrastructure, but who that shape favors and why— with political commitment to a more equal system of communication. That communications infrastructure is not natural, but the product of human decisions, leads us to a consideration of the internet as an infrastructure and the choice we face about how we ought to

arrange it. It is toward this goal that I critique the enactment and implementation of net neutrality policy attempted by the FCC in Chapters 3, 4, and 5, as well as the institutional arrangements in its aftermath in Chapter 6.

Beyond these internet infrastructures, the internet is also itself an infrastructure. The network of networks is foundational to a staggering variety of social, cultural, political, and economic activities— from streaming videos made in Hollywood to uploading what you made in your basement, from reading independent alternative news blogs to tweeting truth to power, from applying for a job to furthering an education, and everywhere in between. The internet, as an increasingly indispensable means of information, communication, and culture, is becoming an essential infrastructure to modern societies— but, consistent with the "splintering" of infrastructure under neoliberal privatization (Graham and Marvin 2001), these resources are not available on equal terms, at the expense of historically marginalized communities in ways that must be addressed in public policy. Law professor and policy advocate Susan Crawford has taken up a position as a public intellectual to push for this cause, prominently showing how high-speed internet access has become so essential that it ought to be deployed and regulated as a public utility (2013). Beyond the basic social inclusion that comes from the universal service tradition of telecommunications regulation that internet access ought to inherit, the justification for public utility regulation of broadband extends to the broad societal value that comes from the existence of the internet as an open, general-purpose communications infrastructure. A coalition of legal scholars, including Crawford (2009, 2013), Brett Frischmann (2012), Balkin (2004, 2008a), and Yochai Benkler (2006), has made the case that the greatly expanded capabilities of the internet for public communication, connection, and cultural production bring with them important benefits for democracy and social justice. In this view, the internet as an infrastructure

can support the growth of a democratic public sphere, but this entirely depends on the existence of this infrastructure as open.

Infrastructure is dynamic, not static— the dependence on human choices brings with it evolution and change as much as momentum and inertia, especially for a system in the young and unstable period that the internet is still in. A major reason the internet has become an infrastructural resource that enables such a wide range of uses from such a diversity of users is because its initial architecture was specifically designed to be as generic as possible, with little discrimination or preferential treatment for certain users or uses. For the first few decades of the internet's existence— from when the networks were first interconnected in 1983 through the early stages of its mass adoption in the late 1990s— the operation of its material infrastructure was governed by common carriage regulation (Crawford 2009) and the architecture of the information infrastructure was based on the 'end-to-end argument' (Saltzer, Reed, and Clark 1984; van Schewick 2010; Gillespie 2006). This made the internet effectively a general-purpose public resource that provided a basic multipurpose functionality that users could choose to use for what they pleased— it presented open opportunities, not predetermined services. The internet as an infrastructure has changed since those early days, beginning with the shift from dialup to broadband in network access that brought cable companies into the fold as operators of the material infrastructure of the internet. Lessig presciently warned of this incursion of control via internet infrastructures (1999; with Lemley 2000) and subsequent analyses of his (2001) and other legal scholars such as Frischmann (2012) and Barbara van Schewick (2010) explicate the consequences of this shift from openness to enclosure. Frischmann (2012) is unique in analyzing this within the dynamics of infrastructure in particular, through which he problematizes the optimization of networking technologies: the operators of internet infrastructure are nearly all

corporations that, within the dictates of capitalism, will seek to maximize the value of broadband networks as their private property rather than public resources, such that they will prioritize uses that generate the most revenue for them at the expense of other users and uses of the network. This is further exacerbated by the path dependent nature of managing technical systems, with the compounded consequences of these decisions embedded in the functioning of the technologies themselves— for instance, traffic management systems designed and developed to ensure the fast and reliable delivery of content from large media corporations over every other use, as examined in Chapter 6.

This issue is addressed by a group of law scholars— in a coherent body of work in infrastructure studies that does not self-identify with (or even show much awareness of) the relationists and new materialists discussed above— focused on a 'commons' model of infrastructure management— whom I will cheekily refer to as the 'commoners.' The basis of the commoner perspective is the application of the longstanding concept within property law of 'the commons' (resources that are openly shared among members of a community) to the management of infrastructure, especially the internet. Benkler (1998, 1999, 2000, 2001, 2006) and Lessig (1999, 2001, 2004, with Lemley 2001) were instrumental in initiating the commoner perspective, which has been further developed by van Schewick (2010), Wu (2003, 2004, 2007), and Jonathan Zittrain (2008) and most explicitly connected to the management of infrastructure by Frischmann (2012). Frischmann's notion of "commons infrastructure" (2012) is in part descriptive, but mostly prescriptive: he explains how infrastructure in modern societies has historically functioned as a commons but also makes a normative argument that infrastructure ought to be managed in a nondiscriminatory manner. From this perspective, the commons model of resource management assures that the internet can be widely and diversely useful

infrastructure.

The commoners make this case in the face of a private enclosure of the infrastructure commons in a number of different areas in the neoliberal era, which is especially relevant to the internet as an infrastructure. Although one of the first things that jumps to mind about the commons is the classic "tragedy of the commons" (Hardin 1968), the commoners draw from what legal scholar Carol Rose calls the "comedy of the commons" (1986) to find that those who argue for the private operation of social resources do not see the whole picture: in addition to the "tragedy"-associated congestion and depletion of resources that economists call 'negative externalities,' the commons also generates significant 'positive externalities.' Also known as 'spillovers,' these are widely dispersed public benefits that go beyond the private gains more likely to be measurable in a narrowly neoclassical economic model and, as shown by Frischmann (2012), are maximized by commons management of infrastructural resources. Openness of access to infrastructure, without discrimination among users or uses of the resources by a centralized authority picking winners or losers, creates an equitable field of opportunity for people to use the resources however they want and encourages creativity, innovation, engagement, and participation in a diverse array of areas. As it has been framed by Frischmann (2012), Lessig (with Lemley 2000; 2001), Wu (2003, 2004), van Schewick (2010), and other commoners, the battle for net neutrality is all about solidifying a model of commons management for the internet that has dwindled with increasing private control over network infrastructures. As shown in Chapters 2, 3, and 4, net neutrality became a major issue of debate beginning in the early 2000s when the governance norms and technical capabilities that maintained the end-to-end principle started to erode and the common carriage regulation that assured nondiscriminatory access was largely eliminated— in effect, rolling back commons

management of internet infrastructure and kicking off the fight to bring it back.

Building on, and moving beyond this work in internet infrastructure studies, I see net neutrality as an infrastructure. Net neutrality is a principle for the management of internet infrastructure, but it is also itself a kind of infrastructure: in addition to governing the operation of the internet's material infrastructure, net neutrality can be seen as a shared norm that serves as information infrastructure for the network, establishing its existence as an infrastructure commons. Consistent with the understanding of infrastructure laid out above, net neutrality is a foundational resource that enables many social and technical activities that depend on it to function. Many uses of the internet as a participatory medium of communication and culture that users have taken for granted— from peer-to-peer filesharing to uploading user-generated content, from streaming over-the-top online video to connecting with video telephony services— are being squeezed out in an environment where the underlying norms of neutral network management that they rely upon have no meaningful backing in public policy in the US.

To be effective, net neutrality as an infrastructure must become a "regime of alignment" like the formulation of Gillespie (2007). Much like the multi-modal model of regulation proposed by Lessig (1999, 2004)— where architecture, norms, and markets regulate behavior just as much as law does— a regime of alignment as Gillespie theorizes it regulates through a whole "sociotechnical ensemble" of technological system, industrial arrangements, cultural discourse, and legal policy (2007). This dissertation considers net neutrality across these sites of analysis, not just to capture a more full view of the complex interplay of policy, technology, and social practice, but also to theorize how net neutrality might be an effective regulatory infrastructure. Although the case in which Gillespie most extensively develops the "regime of alignment" model is one in which it is used to concentrate power— the 'trusted systems' of

digital rights management (DRM) (2007)— we can see how it can prove a useful model through which to implement the distribution of power across a whole sociotechnical ensemble. Across his work, Gillespie looks at the role that various principles and values play in shaping systems of technical and legal regulation— including intellectual property rights being built into DRM technologies and justifying control over content usage via copyright law (2007), the end-to-end principle shaping internet architecture and discourse surrounding it (2006), and the importance of the concept of open 'platforms' to informing understandings, although not actual operation, of online media (2010).

Drawing from Gillespie's perspective— which echoes that of Lessig (1999, 2001, 2004) and Siva Vaidhyanathan (2005, 2011), among others— we can see why we must resist the temptation to solve a social problem with a primarily technical solution. It can be easy to see it as a technical issue of traffic management to be solved by those managing the network, but the deeply political question at the heart of the net neutrality debate— on what terms does the public get to use to our next-generation communications infrastructure?— must have a political answer. For it to work, that answer will have to arrive through a process of articulation between different sites of intervention: technical, industrial, legal, and cultural. Put most directly, net neutrality regulation will not work if it is enacted in policy alone, without consistent implementation in technical architecture, industrial arrangements, and cultural discourse. Indeed, we will see in this dissertation, thus far it has not. The stakes of this struggle are high, for they will shape the structure of the online public sphere— an issue we will explore now.

Democratic communications and an online public sphere

This dissertation is informed by normative goals for more fair and equitable structures of communication and seeks to contribute a strategic basis for net neutrality policy as a means of

working toward more democratic participation in media. Communication plays an elemental role in democracy— access to information, freedom of speech, and active citizen deliberation are all necessary ingredients for a free and self-governing republic. Media has played a central role in providing for this information, expression, and debate, but since at least the mass media era, communication in democracies has been far from democratic. As the mass media environment has evolved to networked media structures where digital technologies afford new possibilities, there is promise that the internet can sustain more open access and participation in mediated culture and politics. This is what is at stake with the issues explored in this study: without net neutrality, the internet cannot meaningfully function as a democratic public sphere. Specifically, net neutrality discourse taps into deeply rooted public values of fairness and equality and holds the potential to serve as a revitalization of the tradition of affirmative regulatory intervention for democratic communications. That is the answer to the "So what?" question for this dissertation. Such matters of communication in the service of democracy have long been discussed within media studies and elsewhere through "public sphere" theories that have gone through waves of evolution in relation to social and technological changes. Let us briefly sketch the relevance of those theories here.

The public sphere is a core concept in media studies scholarship— a key way of theorizing the role of mediated information and communication in the functions of democracy. After the translation of Jürgen Habermas' *The Structural Transformation of the Public Sphere* (1989) into English and the important revisions to his theories of the public sphere by Nancy Fraser (1990) and others, a wave of influential interpretations and applications of public sphere theory to mass media followed (Calhoun 1992; Keane 1991). Particularly in the context of the rise of neoliberalism in the Margaret Thatcher-era UK and its attendant attacks on the BBC,

public service broadcasting was cast as a kind of public sphere in providing for information and communication outside the realms of the market or the state (Curran 1991; Garnham 1992; Scannell 1989). Even commercial radio and television broadcasting have been shown to provide some public sphere functions, for instance, through opportunities for encountering citizen voices in media discourse (Livingstone and Lunt 1994) and different representations of race, gender, and class around which collective identities are negotiated and constituted (Hilmes 1997; Newcomb and Hirsch 1983).

Such work on the mediated public sphere shows, however, how the possibilities of mass media to serve as a democratic public sphere have been ultimately circumscribed. Mass media rather serve as a representative public sphere, in the sense that radio and television provide representations of people in the public sphere and representations of the public sphere to the people, but not meaningful participation in media on an open and equitable basis. Ultimately it is meaningful participation in and through media that makes publics not just audiences— people coming together around some shared sociability to act collectively add up to more than the sum of their parts (Dayan 2001; Livingstone 2005). This suggests two particular ways in which the public sphere has been reconsidered in relation to media: the reworking of the concept in relation to the internet and a reconceptualization focused on the public sphere not as a space but a set of practices.

The public sphere functions of media are significantly different in a digital networked media environment and, in response, the concept of the public sphere has been reconsidered since the rise of the internet. Much scholarship in communication and media studies has reworked ideas of the public sphere in relation to publics and counterpublics organizing, expressing themselves, and acting toward social and political issues online (Breese 2011;

Downey and Fenton 2003; Ferree et al. 2002; Jensen 2010; Moe 2010; Palczewski 2001; Van Laer and Van Aelst 2010; Bennett 2003). The public sphere functions of online social media in particular have been considered in the terms of "networked publics" (boyd 2014) and as linked interrelated spheres in a "culture of connectivity" (van Dijck 2013). The most thorough reconceptualization of public sphere theory as applied to the internet has come from Zizi Papacharissi (2002, 2009, 2010). Papacharissi has theorized the internet as a hybrid public/private space which she initially termed a "virtual sphere"— a common virtual space shared by "several culturally fragmented cyberspheres" (2002)— but has described it in her more recent work as "a private sphere" (2010). Although it remains vexingly vague why, for all her focus on the hybridity and convergence of public and private in online communications, she moved to "a private sphere" as her chosen terminology, Papacharissi raises valuable points about the ambivalent democratic potentials of public sphere functions in personalized online spaces (2010).

The affordances of digital networked technologies certainly suggest another "structural transformation of the public sphere." In *The Wealth of Networks*, Benkler describes the rise of a "networked public sphere" that affords wider access and participation in "peer production" of media and greater public connection and sharing, enabled by digital network structures that are more open, decentralized, and nonhierarchical than mass media based in broadcasting logics (2006). Those with internet access are able to contribute their own information, knowledge, and views and to represent themselves, their communities, and their own interests in a more direct way and at a greater scale than prior media have offered. An important structural transformation to a networked public sphere is also the flexibility of digital media technologies to serve as tools for both information and communication for everyday users: the internet combines the wide

information dissemination possibilities of broadcasting and publishing that were previously only available to the large institutions of the traditional mass media with the interpersonal communication and expression possibilities of telephony or post services that previously had only point-to-point distributions.

Net neutrality is closely related to the changing public sphere dynamics of online media. Benkler (2006) focuses on the management and regulation of internet architecture on a "commons" basis as key to opening up access and participation in internet media and net neutrality is perhaps the single most important principle informing the infrastructure commons of the internet. The openness of the internet fundamentally depends on the continuation of standards of openness such as net neutrality and the battle of putting the principle into policy therefore has great consequences for the public sphere possibilities of the internet in the future. Net neutrality is also relevant to the blurring of public and private in the online public sphere explored by Papacharissi (2010) because it is ultimately a way to make a private space serve public functions. Since the privatization and commercialization of the internet in the 1990s, nearly all of the internet's infrastructures and services are privately owned, but net neutrality is part of a long tradition of affirmative regulatory intervention to assure equitable access to private properties that are essential public utilities (Nunziato 2009; Crawford 2013). While the push for public ownership of internet infrastructure is an important movement adjacent to that for net neutrality, in line with the regulatory tradition of common carriage, net neutrality policy can make private resources operate for the public good. Further, even classic public sphere theory has recognized that publics can operate within private spaces— after all, Habermas' bourgeois public sphere functioned in the commercial space of the coffee shop.

A further reconceptualization of the public sphere is that it is not actually a 'sphere' at all:

recent public sphere theory has shifted concern from spaces to relations. “The public sphere” is now more often discussed not so much as a discrete place as it is a function of certain social practices (Lunt and Livingstone 2013), even in Habermas’ own work as it has evolved since his initial model of the public sphere (1984, 1996). Public sphere functions are achieved, that is, anywhere and anytime people are participating in communicative activities together toward something of larger importance. The internet can serve that function, but it depends on creating conditions that allow for equitable participation in public discourse— which is what net neutrality seeks to do.

This relational perspective on the public sphere can help explain how net neutrality can work as media regulation in the public interest that goes beyond questions of ownership and into questions of values. Working toward a democratic public sphere is not so much about access to public space for communication as it is about enacting “public values” (Giroux 2011) in communication. The pertinent issue for building an online public sphere, then, is not whether the internet is a public space or a private space, but whether we govern the network with private interests or public values. Net neutrality is a principle consistent with public values such as equality, nondiscrimination, participation, openness, transparency, and tolerance— a neutral network is a social structure where its users have a voice that matters. *Participation*, in particular, is a public value related to net neutrality that is crucial to the meaningful operation of an online public sphere. Seen through concepts such as Jenkins’ “participatory culture” (1992, 2006, with Ford and Green 2013), Peter Dahlgren’s “civic cultures” (2009), and Balkin’s “democratic culture” (2004), participation in the creation and circulation of media culture online that some characterize as trivial actually contributes directly and indirectly toward participation in the creation and circulation of political and civic communication.

This body of public sphere theory provides a vision that animates my research by illuminating the importance of providing the means for public expression and action on an open and participatory basis as crucial to democracy and social justice. Obviously, this vision has not yet been a reality, but it remains an important ideal that I believe is worth working toward. The early internet— built as an open infrastructure, sustained by net neutrality— inspired many observers to hail the coming of a cyber-utopia that would finally realize this public sphere ideal, but subsequent development has favored private interests that work to re-entrench the same inequalities that characterize other media systems. Is the internet a democratic public sphere? No. Can the internet be a democratic public sphere? No one knows for sure, but it is worth trying as hard as we can to find out. The material affordances of digital networked technologies and the discourses of openness that constituted them have very real potential to serve as an infrastructure for a democratic public sphere. The internet can allow for a more diverse array of information and news— just look at Wikipedia or citizen bloggers. The internet can enable greater circulation of creativity and expression— just look at independent YouTubers or BitTorrent. The internet can provide more opportunities for public deliberation and organizing— just look at Reddit or Twitter. However, it is not inevitable that the internet will allow for any of this— all of it depends on how the network is managed, regulated, and used. The internet can just as easily facilitate greater control of information, expression, and organizing— just look at how each of the above examples would be marginalized on a post-net-neutrality internet. A crucial step toward realizing the potential of the internet is choosing policy based in the public values that form the basis for democratic communications— values consistent with the principles of net neutrality. All of these cultural, political, and technological factors play into how the internet emerges as a media system. Let us now explore some ways of understanding how this process of

media emergence works.

Toward an emergent media studies

Despite popular understandings to the contrary, new media do not plop down in society fully formed and ready to go, but are structured out of a complex process of social shaping and discursive construction. A medium is not a naturally occurring phenomenon, but is a set of practices and discourses inscribed onto a technological system. To truly understand a new medium like the internet, we must look closely at the various social, cultural, political, and economic forces that work to shape the discourses and uses of technology that become articulated to stable media formats. Rather than consider the emergence of the internet in isolation and claim that everything about it is unprecedented, as is too often done, we do better to look to similar moments of media emergence in history to separate ruptures from continuities and better recognize where the possibilities for actual transformative potential exist.

New media studies must focus not just on the affordances and uses of today's digital networked technologies, but also on the 'newness' of media itself, both currently and historically. Media are social structures and tools for social practice, but they are also processes— especially when they are new and have not yet taken a stable coherent form. The implications of new media become clear only within view of this process and we need perspectives that take account of it and can move toward explaining it. To this end, here I consolidate existing scholarship to develop an approach that I call *emergent media studies*. Conceptualizing media as 'emergent,' I propose, furthers an understanding of the social, cultural, political, and economic forces that encourage and discourage particular technological developments and routinized uses of media when they are new— and, therefore, the possibilities

for freedom and control these new media offer as they are taken up by users.

I use the term 'emergent media' to draw attention to at least four important aspects of new media that warrant consideration.[5] First, 'emergent' emphasizes how new media exist "in-process:" emergent media are still "coming into being," a moving target for scholars and for users, regulators, and practitioners that is rapidly developing and changing. Second, 'emergent' speaks to new media as not entirely 'new,' but "becoming prominent:" rather than implying "not existing before" or "of recent origin," emergent media's long histories are still being revealed and we are still making sense of them.[6] Third, drawing on theories of networked systems as scholars like Tziana Terranova (2004) and Lisa Gitelman (2006) do, 'emergent' shows new media as "effects of complex causes," made up of more than the sum of their parts: media are complicated assemblages of artifacts, protocols, and practices and defining them as 'emergent' captures the multiplicity and irreducibility of these complex systems. And fourth, 'emergent' usefully echoes Williams' (1987) formulation of "emergent culture" that is newly arising, not a part of, and often in opposition to, the dominant culture, but especially vulnerable to incorporation into the hegemonic bloc— how we might understand, for instance, many new media practices that operate outside of market-based social relations but are quickly being channeled toward the interests of capital.[7]

The guiding principle for an emergent media studies approach, ought to be that, because (following Williams (1974)) media are both "technologies and cultural forms," they are shaped as both technological and social structures.[8] Therefore, to understand the process of media emergence, we must begin with the foundational theories of the *social shaping of technology* and *structuration*. These two frameworks provide solid footing to explore media as both technological and social structures, as I do in this dissertation.

Social shaping of technology (SST) theory posits a fundamentally relational dynamic between technology and society: arguing against both technological determinism and a socially symptomatic view of technology, SST theory finds that technologies are at once both socially shaped and socially shaping.[9] SST especially draws our attention to both the material reality and simultaneous "interpretive flexibility" (Bijker and Law 1992; Bijker, Hughes, and Pinch 1987) of emergent media technologies and the cultural struggles influencing their design, development, and use. In particular, the outcomes of these battles as media emerge become the terms on which those technologies operate into the future: what, and crucially *who*, a given technology is for. The "path dependence" of technology (David 1985) means that the early decisions made about emergent media afford and delimit the possibilities they offer going forward, especially as they stabilize within institutional and social structures (Lievriouw 2006).

This is related to the concept of *structuration*. As articulated by Anthony Giddens (1984), structuration theory is based in the inextricable duality of structure and agency: individual and collective action is limited by social, institutional, and material structures, but no human action would be possible without them. Under structuration theory, structures are seen as sets of rules and resources for action, which both enable and constrain agency. Further, structure itself is necessarily the product of agency, so it is produced and reproduced through action within it. Structurational theories of information technologies have been advanced most prominently in Wanda Orlikowski's work on the duality of technology (1992) and the enactment of technological structures through practice (2000). Structuration helps us understand how media structures are enacted in practice and subsequently provide affordances for and limitations on action. Emergent media as structures are constituted through the choices made about and uses of them— choices and uses that are made within existing cultural and institutional structures.

Further, as they become embedded in societal and material forms, media are infrastructures that facilitate some communicative practices and impede others.

From this perspective we can arrive at a core assertion about emergent media: *the social shaping and structuration of emergent media occurs through the operation of discursive and institutional power and results in normative and material affordances for and limitations on their use.* In particular, I see the discursive and institutional power conferred by public policy as especially key to structuring emergent media and therefore the possibilities that the norms and materials of these media offer for access to and participation in communicative practices. To understand this process we must investigate each of the elements at play: culture, political economy, and infrastructure. To do this, it is necessary to draw from the bodies of research primarily concerned with the influence of each of these factors on the practices and technologies of emergent media: media and cultural studies, political economy of communication, and science and technology studies. I will now briefly consider the contributions each can make to an emergent media studies approach.

Cultural forces influence emergent media through the exercise of values and rituals that confer authority to dominant groups. We can see from work in media and cultural studies (MCS) that media emerge along the lines of discursive power. Cultural histories of media have shown particularly clearly the role of dominant discourses of identity, community, taste, privacy, and publicity in shaping the emergence of media like radio, television, film, recorded sound, cable, satellite, and the internet (Abbate 2000; Boddy 1990, 2004; Douglas 1987; Gitelman 2006; Hilmes 1997, 2012; Marvin 1988; Schulte 2013; Spigel 1992; Streeter 1996, 1997, 2010; Parks 2005; Sterne 2003; Turner 2003; Winston 1998). Key to understanding a cultural perspective on emergent media is the process of "discursive construction:" under Foucauldian discourse theory,

the language, actions, and practices that become associated with a particular matter work to form the matter itself, so the way that we talk about media can end up shaping the way we think and act with media. Further, there is no necessary belongingness between media technologies and their normative uses. This is the distinction that Lisa Gitelman makes between media's "technological forms and their associated protocols" (2006: 7) and the contingent connection between the two to which Jonathan Sterne (2003) draws our attention. The relationship between technology and practice that is constitutive of emergent media is an "articulation"— in the sense used by Stuart Hall (1986)— and, therefore, subject to a negotiated process of disarticulation and rearticulation in dominant and oppositional discourses that operates until a hegemonic consensus is reached as the common sense definition of the medium. Romantic, cyber-libertarian discourses of freedom that circulate in technologist circles, popular culture, the commercial market, and political and regulatory institutions did much to shape the open architecture of the internet in its early years (Gillespie 2006a; Streeter 2010; Turner 2006), but recent discourses of security and stability have contributed to increasingly centralized structures of control (Gillespie 2006b; Lessig 1999; Zittrain 2008).

Political economics work to shape emergent media through the enactment of capitalist logics in corporate and regulatory operations. Political economy of communication (PEC) shows how material power relations underlie institutional structures and therefore industrial strategies of accumulation, commodification, concentration, and privatization hold sway over media emergence. Specifically, political economic studies of communications industries and policy have been particularly strong in analyzing how the interests of capital operate through structures of governance and regulation to shape historically emergent media (McChesney 1993; Starr 2004; Streeter 1996; Wu 2010) and contemporary emergent media (Crawford 2013; Lessig 2001,

2005; McChesney 2013; Schiller 2000). PEC approaches typified by Robert McChesney emphasize how emergent media operate in critical junctures (1993; 2007; building on Gramsci) and how the social forces that converge in these historic moments can open up and/or close down possibilities for structural change for and with media. Historical political economic analyses show how political choices made in media's "constitutive moments" (Starr 2004) shape the structures of media systems, customarily resulting in expanded access to the means of media consumption but limited access to the means of media production and distribution— greater *inclusion* but less *participation*. The historical pattern through which media structures typically become increasingly concentrated and controlled by commercial media industries has been described by Brian Winston (1998) as the "'law' of suppression of radical potential" and by Tim Wu (2010) as "the cycle" through which media systems move from open to closed. The "politics of media policy" (Freedman 2008) are crucial to the way that this process works and political economic analyses effectively break down the myth of policymaking as a rational disinterested technocratic process (Slotten 2000) and reveal the structural conditions that lead to regulatory capture and corruption (Crawford 2013; McChesney 1999; Lessig 2001, 2011; Pickard, Forthcoming). Resulting media policy customarily protects incumbent corporations against competitors, newcomers, and market disruption. The "corporate liberal" values underlying media policymaking in the US stress stability (Streeter 1996) and, combined with the tendency for new media to be caught in the "regulatory hangover" (Holt 2011) of existing media policy regimes, add up to entrench established interests. Digital media regulation— often under the guise of 'deregulation'— has been used to concentrate power over the internet, often as a way to reshape new media to fit the status quo of old media (Crawford 2013; Lessig 2005, 2006; McChesney 2013).

The existing technological structures that new media are built upon also serve to shape emergent media. Science and technology studies (STS) provides the most useful perspective to understand this 'infrastructuring' (Bowker and Star 1999; Hughes 1983, 1989; Star and Bowker 2006; Star and Ruhleder 1996)— essentially, how technologies structure other technologies. STS has a long tradition of "opening the black box" of technology (Latour 1987; Pinch and Bijker 1984) to reveal the workings of taken-for-granted tools and systems (Hughes 1983, 1989; Latour 2005; Pinch and Bijker 1992) and their social and political consequences (Winner 1986, 1993). Critical attention to infrastructures within STS, led largely by Susan Leigh Star (1999; Bowker and Star 2000), builds on this tradition to explore infrastructures as technologies with wide-reaching scope that remain especially deeply embedded and invisible (Star and Ruhleder 1996). As "pervasive enabling resources in network form" (Bowker, et al. 2010: 98), infrastructures are relevant to understanding emergent media because they serve as the installed base upon which any new development must occur, giving infrastructure the power to afford and delimit what media can and cannot do in a very practical sense.[10] Indeed, STS-inflected work in media studies (Galloway 2004; Parks 2009; Sandvig 2006a, 2006b; Strarosielski 2012) and legal studies (Benkler 2006; Frischmann 2012; Lessig 2001) addresses the infrastructural dynamics of new media technologies consistent in useful ways. Along these lines, the internet can be understood as an emergent media infrastructure that enables the development of a wide variety of new media forms from social networking and mobile applications to online video and wikis, but itself depends on the capacity and layout of infrastructure like fiber optic cables, cellular antennas, routers, and servers. The internet is an infrastructure built on other infrastructures— the modularity and layered model of the network makes this relational dynamic particularly explicit: in addition to the physical infrastructural resources like pipes and data centers, the internet is also

fundamentally made up of logical infrastructures like protocols and standards and content infrastructures like information and media texts.

Building on the work of scholars such as Streeter and Lessig, I see public policy as an especially important angle through which to enter this sort of analysis of emergent media. Media law, policy, and regulation involve combinations of the three forces— cultural, political economic, and infrastructural— noted above that hold particular influence over the process of media emergence. Cultural power and political economic power shape discursive and material relations in the policy sphere and in the development and use of new technologies by becoming part of the infrastructure that both enables and constrains media emergence. Media policy and the policymaking process surrounding it provide the analyst with a suitable site not only to observe these cultural, political economic, and infrastructural forces at work in complex interrelated ways, but to understand and intervene in an especially important moment in the media emergence process when the role of the technology in society is meant to be debated in the public interest. Policy is an important object of study for emergent media studies because media history shows it is a unique influence on the process by inscribing the values, institutional relations, and rules which inform the use and place of media technologies as they emerge— as we will see in the following section.

Emergent media historically

The dynamics shaping media and technological systems during their emergence have been observed historically by many scholars. Cultural histories of old media when they were new, especially when combined with a perspective informed by political economic views and social shaping of technology theory, provide insightful background for understanding the forces

working to shape today's new media— relevant, in particular, to this dissertation's concerns with internet infrastructures. In this section, then, I will give a brief review of some of these historical precedents from legacy media networks. At the moment of a medium's emergence, important social, cultural, economic, and political forces influence the practices that become associated with these new technologies, eventually impacting the shape that a new medium takes and, subsequently, the possibilities it offers for society. With the focus of this dissertation project and this particular chapter in mind, the history I tell in this section will focus on the role of policy and discourse in shaping these emergent media technologies, finding the question of open vs. closed infrastructures key to determining the participatory or exclusionary nature of these media systems as they developed.

Historical comparisons between media show patterns in their emergence and lessons that apply to the understanding of emerging internet infrastructures developed in this dissertation. Carolyn Marvin (1988) examines the moment of newness for a medium in an approach taken up across comparative media histories. Marvin's widely influential *When Old Technologies Were New* (1988) is primarily about the development of electric light and telephony, but her analysis extends to the nature of new media technologies generally. The foundational formulation Marvin draws from this history is that as new media emerge, they serve as new platforms for the renegotiation of deep-seated social and cultural struggles, provoking both utopian hopes and dystopian fears.

This 'old media when they were new' approach is most explicit in the comparison of radio, television, and digital media emergence undertaken by William Boddy (2004) and the exploration of newness through the histories of sound recording and digital media laid out by Lisa Gitelman (2006), but is also influential in the sweeping multimedia meta-histories by Brian

Winston (1998) and Tim Wu (2010). Boddy looks at the early moments of openness and instability in radio, television, and digital media history, with a keen eye for the role of discourse in influencing the social and political decisions made about these media when they were new and how that delimited their possibilities as they developed. Gitelman's *Always Already New* (2006) can be seen as an update to the 'old media when they were new' approach, but with more explicit comparisons between old media and new media. From historical analysis of sound recording and digital networking— both media that came to be defined by uses of their respective technologies that were unexpected when they emerged— Gitelman explains how media are socially negotiated. Winston (1998) provides a broad meta-historical analysis of telegraphy, telephony, radio, television, computers, and the internet, which he uses to develop an elaborate model explaining the patterns evident in the trajectory of each technology. He proposes a theory emphasizing the social conditioning of technological evolution by economic and regulatory forces, operating through what he refers to as the "supervening social necessity" that brings a new technology to prominence and the "suppression of radical potential" that in turn limits its possibilities (1998). While not as historiographically sensitive, Wu's comparative history of radio, television, film, telephony, cable, and the internet lays out an important interpretation of 20th century media history as a cycle from initial openness to closure through regulation favorable to corporate dominance (2010). Wu's analysis concertedly draws out lessons from this history to be applied to contemporary internet policy debates, especially net neutrality.

Media history shows how policy plays an especially strong role in shaping media as they emerge. Paul Starr's extensive history of American media systems (in transnational context) establishes the importance of policy in shaping the structures of media (2004). Starr draws out an emphasis on the political decisions that shaped media institutions during the "constitutive

moments" of their emergence, establishing the pivotal nature of issues like freedom of expression, privacy, access to information, and intellectual property in ways that echo within contemporary battles over new media (2004). If we look across the histories of various media systems, we can see how such policy decisions shaped the emergence of media including film, video, records, radio, television, cable, and telecommunications.

Film, video, and recorded sound developed as media content and commodities in a particular regulatory framework that provided the terms on which their production, distribution, and exhibition could take place. Content regulation in various forms played a particularly important role across film, video, and recorded sound histories. Copyright law was formative to the film industry— Hollywood was born via piracy and has been entangled with various forms of authorship ever since (Decherney 2012)— and in the uses of videotape— the very existence of video recording and playback for consumer use depended on crucial legal decisions protecting fair use (Hilderbrand 2009). Meanwhile, patents feature prominently in the history of recorded sound as a means of consolidating industrial control in its early years (Millard 2005). Beyond intellectual property, though, outright censorship has been used to define media, as in the case of early film works being regulated along lines of cultural privilege that worked to define and shape the social function of cinema (Grieveson 2004).

Radio provides an especially evocative example of the contingent and contested nature of emergent media and the power of regulation to structure media when they are new. As Susan Douglas's groundbreaking history of the formative years of broadcasting (1987) demonstrates, radio technology began by being open and participatory but came under centralized control. She illuminates the social forces that shifted radio technology from usage for two-way communication to becoming a medium of broadcasting. Her historical analysis centers on

ideological conflict in the "social construction of radio," especially in the pivotal centralization and institutionalization of radio via regulation. Susan Smulyan (1994) argues that the system of national commercial broadcasting in the US was established particularly through the influence of the advertising industry, which McChesney (1993) shows was the result of consequential regulatory battles that parallel contemporary struggles over emergent media. McChesney's history— a touchstone for understanding the role of policy in shaping the structures of media as they emerge and the conflicts over control of those structures— focuses on the movement against commercial broadcasting led by public media advocates and the culmination of this struggle in the Communications Act of 1934 that consolidated commercial control over radio. Michele Hilmes (2012) valuably places radio's emergence in transnational cultural context, impressively tracing the dialectic of cultural exchange between the US and the UK that came to define their respective commercial and public service systems of broadcasting. In particular, Hilmes traces the influence of discursive framing by one nation against the other in the early policy decisions that shaped their broadcasting systems (2012: 27–85).

Television was also shaped through policy choices, although more obscured decisions related to technical standardization, as discussed by Boddy (1993) and Hugh Slotten (2000). In his history of early television, Boddy sketches the pivotal decisions that structured the television industry and its programming forms, especially in the 1930s and 1940s, when the precedents were set for commercial television (1993). Slotten (2000) spells out the role of US regulatory agencies in shaping the development of the radio and television industries, with a useful focus on the massive influence of arcane, supposedly "technocratic" decisions like technical standardization. Cable television was shaped by re-regulation (Parsons 2008), enabled by the utopian discourse upon which Streeter focuses in his analysis of cable policy and its influence on

cable's structural shift in the 1960s–1970s (1997). In his useful discourse analysis, Streeter shows how changes in the ways of talking about a technology in the policymaking arena can lead to changes in the uses and structures of the medium (1997.)

The history of telephony, telecommunications, and digital networking is one marked by various forms of government intervention into emerging structures. A system of regulated monopoly has defined most of the history of telephony. Milton Mueller (1997) provides an historical analysis of early telephone service that details the regulatory construction of the Bell system that defined US telecommunications. Challenging the standard view of telecommunications as natural monopoly, Mueller argues that this centralized system was neither inevitable nor as beneficial to universal service as it has been often shown to be (1997). The emergence of the internet was enabled not only by this underlying telecommunications infrastructure, but also by the US government's investment and involvement in digital networking research and development. The internet's beginnings came in the US Defense Department's Advanced Research Project Agency (ARPA), with government funding supporting the research and development of ARPANET— what would become the early internet (Hafner and Lyon 1998). Janet Abbate's quintessential history of the early internet focuses on how computers became communications media through networked connections and explores the values of the individuals and institutions that informed its technological development at this intersection of government, industry, and academia. The internet further took shape through discursive construction at the intersections of the government, technologist, and popular cultural sites out of which its technologies arose (Streeter 2010; Schulte 2013).

The broad strokes of media history traced above are important to observe the historical patterns that inform my analysis. We also ought to train some focus on a particular historical

moment that I argue has special relevance to the case of dissertation considered in this dissertation. This is the emergence of cable systems and the attendant rise and fall of public access television.

Public access cable television as historical emergent medium

These histories help us situate the emergence process as it operates today, and gives a clear indication of what is at stake. Many of the proclamations about new media and public participation familiar today surrounded old media when they were new. 'New technologies will democratize media culture.' 'New media will make culture more participatory.' 'More affordable and accessible media production equipment with broad and expanding networks of distribution will allow amateurs and everyday citizens to make and share their own culture in unprecedented ways.' 'The barrier between producers and consumers will be knocked down and there will be a new place for grassroots, alternative, and marginalized cultures alongside mass mainstream culture.' These were all exclamations made in the 1970s to describe public access cable television.

While it is frequently declared inevitable today that new media will revolutionize culture by expanding participation, this same discourse of certain media democracy accompanied 'new media' of the past, as well. The breathless claim that the emergence of new technologies is enough to substantially alter existing media structures and practices has a strongly technologically deterministic logic. However, looking to the reception of yesterday's 'new media,' such as public access cable television, can show us how the introduction of new technologies is insufficient to change media culture: the combination of increased accessibility to video production and editing equipment and expanded channels for the distribution of new video

content was not enough to institute the wide social change promised at the time. Even if these new media held great participatory potentials, all new technologies are socially shaped, so the implications they have are determined not only by the tools themselves but also by the way that they interact with social forces (MacKenzie and Wajcman 1999; Williams and Edge 1996).

The specific case of public access cable television provides an instructive example of this process of emergence that is worth considering in a bit more detail. There are particular parallels to the case of internet infrastructures and the role of policy in shaping its possibilities that can provide valuable lessons for understanding net neutrality. The strong participatory possibilities opened up by cable technologies were not fulfilled as they took shape, a trajectory that internet infrastructures may follow without the protection of net neutrality, as I argue here. The example of public access television is an evocative one for historicizing our understanding of today's new media, as well. Examining the emergence of public access television at an historical conjuncture that held the promise of expanding media participation, as the internet does today, allows us to better understand our own moment and perhaps parse out some lessons from the past so as not to fall short again.

Public access television refers to local cable channels open for public use and also to the programming produced by groups and individuals for these channels. Beginning in the 1970s, cable system operators around the country made available to local communities on a first-come, first-served basis the equipment, facilities, and 'airtime' necessary to produce and distribute television programming of a kind totally determined by the community. In many cases, public access centers continue to provide any technical training needed and are free of charge, while programming itself is limited only by local obscenity and slander laws. In these communities, then, anyone has the opportunity to express herself over the dominant and once closed-off

medium of television. From the vantage point of our current digitally networked media environment, it is easy to forget that public access cable was once widely seen as nothing short of a media revolution. This earlier attempt to democratize media contains much to learn about the current attempt at media democracy— this historical example of participatory culture enabled by the formerly new media of videotape and cable can teach us much about what is actually new about today's 'new media.'

As Streeter (1997), Laura Linder (1999), Peter Parsons (2008), Deirdre Boyle (1997), and others have shown, public access was born of a range of social, cultural, technological, political, and economic factors coming together at the particular conjuncture of the early 1970s. This period saw a spilling over of social and cultural unrest from the 1960s and optimistic activism for radical social change, with many seeing the creation of alternatives to commercial mass media as a crucial component for the cause. In this environment, the increasing discontent with the dominance of the broadcast television networks gave rise to both a push for public media and, springing out of the youth counterculture, a 'do-it-yourself' (DIY) alternative media movement that grew from self-published newspapers and magazines and pirate radio to include guerrilla television. The DIY ethos of alternative media was greatly enabled by the affordances of the inexpensive and convenient video technologies available beginning by the late 1960s— most prominently the Sony Portapak, a portable video camera that made production simple and affordable enough for amateurs. Further, the development in the 1960s and 1970s of what was once known as 'community antenna television' into multichannel cable television systems made more channels available for the distribution of video content, raising the possibility of a new outlet for this work.

Much of the response to prevalent concerns over the limitations of broadcast television

resulted in excitement about these promising new technologies. Streeter shows how cable became redefined by the utopian "discourse of new technologies" which came from an unlikely alliance of progressive activists, government regulators, and the cable industry, whose only common interest was an opposition to the broadcast networks (1997, 1987). This discursive construction of cable as a "new technology" excited widespread "blue skies" optimism and led to re-regulation to encourage its growth (Streeter 1987, 1997).

Public access was an important part of this conception of cable as an agent of potentially great social change. Cable systems expanded into new communities nationwide in the 1960s and 1970s and franchise contracts with local governments granted a single operator control over the entire community's cable. Playing to the utopian discourse of cable technology, recognizing their position in a high-growth 'buyer's market,' and trying to make the agreements appear less monopolistic, many local governments were able to get cable operators to make public access facilities, equipment, and airtime part of the franchise agreement. Public access also helped the cable industry separate itself from broadcast television and legitimate itself, as cable companies cast themselves as more socially responsible and in touch with local communities (Linder 1999: 8). In 1972 the FCC began requiring new cable systems to provide channels for public access, (along with channels for educational and governmental use), which led to a consequential court battle whose influence was felt all the way down to the net neutrality rules at issue in this dissertation.

Cable operators fought the public access requirement and, in the 1979 *FCC v. Midwest Video* case ("*Midwest Video II*"), the Supreme Court agreed and struck them down.[11] Cable operators argued that the public access requirements amounted to common carriage regulation, in that the FCC was obligating them to allow open and nondiscriminatory access to the cable

network, which violated their rights to "editorial control" over the content they carry. In making this argument, cable operators asserted that they were broadcasters, who are insulated under the Communications Act from any common carriage regulation because they are considered to be 'publishers.' The FCC, for its part, tried to have it both ways: in prior cases where it asserted its regulatory authority over cable (including a previous Supreme Court case involving Midwest Video), the Commission had to show sufficient similarities to broadcast television in order to show that its policy was "reasonably ancillary" to its existing broadcast authority, but it also wanted to leave open other possibilities for the technology through regulation as a general-purpose infrastructure.[12] The Supreme Court found that cable operators are akin to broadcasters and so the FCC has no authority to intervene in what content they carry. The Court asserted that cable operators are "electronic publishers" whose "journalistic integrity" would be interfered with by requiring them to carry content produced by members of the public.

The *Midwest Video II* decision was pivotal in the development of cable and further became an important precedent in FCC regulation, especially to the case of Open Internet policy, as we will see below. While providing today the same television content as broadcast networks could make the point that cable network operators are broadcasters appear to be obvious, this was actually a substantive position for the Court to take. At that point in the 1970s, it was still unclear exactly what uses cable network technology would be put and it was far from a foregone conclusion that cable would be used similarly to broadcasting as a medium for television content. The Supreme Court's decision, then, can be seen as a choice between whether cable as an emergent medium would go down the path to be like broadcast television or down a new path as an open infrastructure for participatory public communications. The Court chose the former, which shaped the emergence of cable television in ways we will see below. In the case of net

neutrality, a similar choice faces policymakers about which path the internet will go down and— considering how the *Midwest Video II* precedent has come into play in ways we will explore below— the first steps down that same path are already being taken.

There are many ways that we can understand public access in this era as an historical example of a nascent participatory culture that could have grown. The barriers to entry were lowered by new video technologies and access to audiences was expanded via cable. Social and cultural movements supported the wider sharing of people's creativity. And it fostered social connection within local communities. In fact, the discourse of media democracy, in which participatory culture is a particular manifestation, played a key role in the social construction of public access from the very beginning. Linder notes that founding objectives of the public access movement include empowering people to make their voices heard, encouraging public discourse and diversity, and building community (1999: xxvi), all goals that echo the discourse of participatory culture. Further, the FCC's stated rationale for its public access mandate was to more fully serve the public interest of the underrepresented by encouraging greater participation in public discourse and providing more equal access to media (Kellner 1999: 2).

Public access can further be seen as an example of convergence very similar to that associated with participatory culture, characterized by complex interactions between commercial and grassroots cultures. Public access was shaped by both the top-down forces of cable system operators and government policymakers trying to seize opportunities in a new media field and the bottom-up forces of the communities of users who created the demand and produced the content. The result is a space still remaining within the cable television system, on a channel alongside the commercial programming of major corporate media producers, for noncommercial programming made by people who before were only consumers of television. The role of

television producers and consumers converged in these public access users and the programming they create represents a product of a convergence culture.

Public access television held many participatory parallels to contemporary internet media like YouTube and held much of the same promise to further media democracy. Few would disagree, however, that public access has succeeded at this in only very limited fashion and has largely failed to meet these potentials. The participatory culture in public access television still exists but it does not enjoy the same accessibility, support, and community that it once did. The project of public access has lived on for over 35 years and has extended many people great opportunities to produce their own television, in their own interests, for their own communities. However, this handful of alternative channels and programming has had only a very small influence on the whole media landscape— it did not democratize the media system overall or bring about the grand social change many of its participants envisioned. The reality is that very few people produce or consume public access television today and it no longer plays the role it once did as a vibrant alternative medium.

The idea of public access television revolutionizing media culture seems silly now— however, this silliness is less about the possibilities offered by the technology than it is about the air of inevitability that accompanied many assumptions of their future. The view that these technologies on their own had the power to drive tremendous social change is an example of simplistic technological determinism. Public access's limitations demonstrate how the social, cultural, political, and economic factors surrounding new technologies shape their development and use. In the case of public access television these factors converged in ways that fostered its potential in the 1970s and 1980s but later diverged to constrain it.

Boyle cites shifting social and cultural influences as a primary factor in the failure of the

alternative media movement, as the disillusionment and disintegration of the counterculture as the 1970s went on gave way to the reactionary conservatism of the 1980s (1997: 190-191). Especially in this changing social and cultural climate, the general mood began to sour on public access, whose wide open stance on content brought programs popularly considered controversial, banal, idiosyncratic, lacking in production values, or geared too much toward 'special interest groups.' As DeeDee Halleck puts it public access was too often defined in the popular view by "sex shows and skinheads" (2002). Broad popular conceptions of public access went quickly from excitement to indifference to distaste.

Video and cable are no longer exciting emerging technologies— they were once supposed to change the world on their own, but now it is apparently up to digital networked technologies to take care of that. Indeed, the hyperbolic faith in a technologically determined media revolution was met with a more disappointing reality. The formulation that more people with cameras plus more channels in the media would equal radical cultural change proved to be too simplistic an equation. Video technology went from novelty to banality quickly: as video equipment was taken up in mass quantities by consumer markets, the technologies were absorbed into domestic middle class life as a medium for private memory and nostalgia, rather than public discourse (Boyle 1997: 204-205). Further, the proliferation of channels itself did not prove sufficient for providing more diversity in the media, as the expansion of cable, more than anything, only brought more content dictated by familiar commercial logics (Aufderheide 1992).

On the political economic front, changes in the cable industry and the policies that regulate it threatened the institutional structure of public access television. As noncommercial organizations that depend heavily on fees collected by cable operators from their subscribers and only some public donations, community public access centers are very susceptible to the

prevailing winds of industries and policies. Following its rapid growth, by the 1980s and 1990s the cable industry found itself in a position of power, not as worried about their image relative to the struggling broadcast networks and no longer in need of the public relations bargaining chip of public access to win local community goodwill. Citing low community interest in public access production and playing up the image of programming too idiosyncratic to matter to most people or too controversial to be of social value, many cable operators fought out of the PEG requirements of their local franchise agreements, failed to upgrade dated equipment and run-down facilities, and buried PEG channels in their lineups.

Deregulation of the cable industry has especially shaken up public access. Several states passed legislation in the 2000s to regulate cable at the state level and remove local franchise agreements, including any standing local PEG mandates. This followed heavy lobbying of state legislators by phone companies that were trying to get help breaking into a cable market that has long been locked up in local franchise agreements. All of this was further enabled by a discourse of media progression and replacement that sees old media like public access television as being replaced by new media like YouTube, which is seen as a similar platform for the distribution of amateur video, only better.

It is not enough, though, to see public access as a faltering alternative medium and presume its coming death at the hands of Web 2.0. Rather, we know from the theoretical perspective of "convergence culture" (Jenkins 2006) and "remediation" (Bolter and Grusin 2000) that the interactions of old and new media are actually much more complex, with mutual influences working both ways. Henry Jenkins shows how, as DIY communities that pre-dated the internet have found new homes online, web platforms like YouTube have become the sites of a convergence of long standing media-producing subcultures and the new center of grassroots

media practices once associated with media like public access (2009: 110). Indeed, we can see how many of the logics, aesthetics, and, in some cases, the content itself of public access exist in digital networked form on YouTube.

As hope in public access has been lost, internet media like YouTube, driven by affordances for user-generated content and social networks built around it, are now popularly hailed as the force that will democratize media and make culture more participatory. While this certainty in a technologically determined utopian future is just as misguided as it was for public access, this does not imply that focus on the participatory potential of internet media is itself foolish. Rather, it is a possibility that will result or not depending not on the technology itself, but on the users, institutions, and regulations that act on and with these tools.

Public access opened up space on television for expression, connection, and community for marginalized identities, but these possibilities were not fully realized. This falling short of the media democracy hoped for with the adoption of new media is consistent with new media history generally. Wu (2010) shows the history of 20th century media as a story of open media being closed: he argues that at their emergence each medium of modern communication and culture was participatory, but as they were more widely adopted a combination of political economic factors narrowed access to production and distribution. In his similar history of media technologies, Winston refers to this as the "suppression of radical potential:" he argues that the potentials for media technologies to disrupt the social order have consistently limited by dominant institutions (1998: 11-13).

This is perhaps one of the most valuable lessons to be taken from a look back at the long history of new media: that the shape and capacities of emerging media are not inevitable, but are determined in struggle. And it is, of course, just as true of today's new media like YouTube as it

was of public access television. Many of the same battles that resulted in the unraveling of the revolutionary possibilities of public access television are being fought again around online media. We can see this in the ways the distribution bottleneck that has largely defined television— a structure that first public access to cable and now online video platforms were thought to tear down— is being reintroduced in online video. Sandvig (2010) shows how some of these new bottlenecks operate online, including content distribution networks (CDNs, distributed systems of servers necessary for large-scale online content provision) and the top-concentrated nature of search engine and recommendation system results. In this way, YouTube might be taking a shape similar to cable television today, where amateur participation has a space, but one that is increasingly marginalized alongside professional commercial content.

Net neutrality marks a larger-scale version of this same struggle over the shape of participatory media in the regulation of internet infrastructures. The policy battle over net neutrality is in many ways a debate over whether ISPs should be defined as common carriers— the same issue that culminated in the Supreme Court's *Midwest Video II* decision that eliminated mandated public access. Just as cable was re-regulated during its period of rapid growth, the FCC changed its classification of ISPs from common carrier "telecommunications services" to electronic publisher "information services" during the transition from dialup to broadband networks. This opened up the struggle in the US to reintroduce universal access requirements to the internet in the form of net neutrality regulations. As we will through this dissertation, the FCC passed its Open Internet rules in 2010, which came close to net neutrality, but were struck down in the *Verizon v. FCC* case in a decision largely based on the precedent of *Midwest Video II*— that ISPs, like cable operators, cannot be regulated as common carriers if they are defined as publishers in FCC regulatory frameworks. Without protections for the open internet, network

operators and those online content providers who can afford distribution deals with them could easily put participatory online video in the same position as it ended up occupying on cable television.

However, just as the utopian future of media democracy ushered in by new media is not certain, a future where user content and participation online is closed down is also not certain. Today's new media are still emerging and the degree to which their democratic potentials will be met is not inevitable, but must be fought for. This future is yet to be decided— and learning lessons from the failures of previous participatory media is a first step toward making the future different from this past.

Notes

[1] We must be careful, however, to not reify neoliberalism or simplify it as an easy bogeyman. It is useful to understand neoliberalism in more exact terms, like those of Harvey (2005), which theorize neoliberalism as a concerted project of capital redistribution upwards and differentiates between neoliberalism as a quasi-utopian discourse and neoliberalization as an actual material process. Neoliberalism is not actually providing for all, does not actually take any 'hands off the market,' and does not actually offer more competition. As Harvey (2005) argues, these contradictions of the neoliberal state open it up to external dissent and internal tension: authoritarian enforcement in markets is counter to the celebration of personal freedom within its discourse; it celebrates competition but protects monopolies and oligopolies in the process; it is not succeeding in sustaining economic growth, but is actually creating crisis and only succeeding in enriching economic elites. The fractured and insecure process of neoliberalization is shored up by the hegemony of neoliberal ideology, meaning that we can pave the way to change it if we can change that discourse.

[2] Freedman (2008) bafflingly ignores net neutrality, though, and indeed any issues related to internet infrastructures, because he chooses to perpetuate what he acknowledges is a problematic distinction between telecommunications and mass media, saying the former is a more private form of communication and the latter is more properly public. However, as he admits, the internet collapses any of these distinctions, if they were ever actually meaningful anyway. I tend to agree more with Nunziato (2009) that the internet and the common carriage tradition in telecommunications out of which net neutrality comes are necessary parts of any discussion of democratic public communication and the public sphere.

[3] For example, law scholar Brett Frishmann has done great work on infrastructure (e.g., 2012), but seems inexplicably unaware of the larger movement of infrastructure studies outside of his field. He was bold enough to call his book simply *Infrastructure* (2012), yet it contains not a single reference to any work being done on infrastructure not from a narrowly legal or economic approach.

[4] This is based on the internet infrastructure model developed by Frischmann (2012: 320). The most widely used model to understand the layers of the internet's architecture is the OSI layered design model, which splits up the layers slightly differently: data, network, transport, session, presentation, and application (see Zimmerman 1980).

[5] See: "emergent, a." and "emergent, n.," *Oxford English Dictionary (OED)*, 3rd ed., Oxford University Press (2003).

[6] See: "new, a.," *OED*, 3rd ed., Oxford University Press (2003).

[7] See Benkler (2006) for an exploration of non-market-based "peer production" and Terranova (2000) for discussion of channeling these efforts toward the interests of capital.

[8] Gitelman forwards a similar and influential formulation, defining "media" as "socially realized structures of communication, where structures include both the technological forms and their associated protocols, and where communication is a cultural practice" (2006: 7).

[9] SST was developed within the interdisciplinary field of science & technology studies. It has been explicated most thoroughly by Mackenzie and Wacjman (1985) and Williams and Edge (1996) and most prominently applied to new media technologies by Lievrouw and Boczkcowski (2008; Lievrouw 2002; Boczcowski 2002). Other relevant explorations of the social shaping of new media include Edwards (1996), Sterne (2003), Bowker and Star (1999), Mackay and Gillespie (1992), Gillespie (2007), and Abatte 2000.

[10] Media history provides many examples of this 'infrastructuring' dynamic, such as broadcasting networks depending on film and telephone technologies for program production and distribution.

[11] *FCC v. Midwest Video Corp*. ("*Midwest Video II*"), 440 US 689 (1979), http://supreme.justia.com/cases/federal/us/440/689/.

[12] *US v*. *Southwestern Cable*, 392 US 157 (1968); *US v*. *Midwest Video* ("*Midwest Video I*"), 406 US 649 (1972).

Chapter 2

A History of 'Net Neutrality' Discourse, 2003-2013

Network neutrality is ultimately a principle of internet governance that exists independent of any particular policy drafted or enacted in its name. To understand what this principle is and how it has, or has not, informed policymaking, we must look historically at how 'network neutrality' has been identified, translated, and deployed over time. In the decade-long debate about net neutrality, the principle has been defined several ways by a number of groups. As the term has been translated by various stakeholders to particular situations, it has absorbed the values and interests of those who employ it through a process of discursive construction and articulation. Although it has taken on different meanings in different contexts— and despite being called by some a hollow term with no real meaning to it at all[1]— a relatively stable common sense of 'network neutrality' as a principle has been articulated to the term. At the heart of network neutrality is the notion that *access to network resources should be granted on a universal and nondiscriminatory basis.*

In this chapter I trace a history of 'net neutrality' through its different meanings across various technical, economic, and political contexts. I focus on the various ways 'net neutrality' has been defined as a principle by following its historical "genealogy"— a term I use in line with Foucault's understanding of history unfolding as the mutation of discourses (1991). Rather than a simple linear history, this study follows the discursive construction of 'net neutrality' as a keyword in its evolution from technical principle to its association with broader economic and civic notions. These shifts in the discourse of 'net neutrality,' with the converging and diverging

of the alliance that both produced and was a product of this discourse, enabled and constrained significant developments in US broadband policy and practice.

This chapter applies the methods of discourse analysis to the use of 'net neutrality,' related terminology, and their articulations through media coverage, legal and technical literature, corporate and advocacy group messaging, and policy documents, from 2003 until 2013. The first section sketches the discursive construction of 'net neutrality' and its articulations to technical discourses of efficiency and innovation, economic discourses of consumer choice and marketplace competition, and civic discourses of free speech and civic engagement, as well as hostile discourses such as libertarian articulations to unnecessary government intervention. The second section shows shifts in net neutrality discourse, to new discursive formations such as 'internet freedom' and 'open internet,' the latter of which played a central role in shaping FCC Open Internet policy beginning in 2009. The final section offers some thoughts on the relative influence of various discursive formations for the development of net neutrality policy. This chapter shows how the articulation of the net neutrality principle to different discourses and values both enabled and constrained the possibilities for its enactment in policy. I argue that 'net neutrality' brought together a diverse discursive alliance that pushed the issue forward around 2006, but the discursive shift away from 'net neutrality' and toward 'open internet' in official policymaking proceedings since 2009 worked to dilute the issue by disarticulating it from the values and principles of its initial discourse.

'Network neutrality' discourse began in the technologist community in the early 2000s to describe efficient network design that encouraged *technological innovation*. It was further taken up by online application, service, and content providers such as Google and used in the economic context of *fair marketplace competition* that maximizes consumer choice and eliminates

discriminatory advantages from vertical integration. As debates about broadband policy became more prominent by the mid 2000s, 'net neutrality' started to be a public interest issue for advocacy groups such as Free Press and it began to take on more political meanings related to *freedom of expression, civic engagement, and democratic participation*. As the interests of these groups coalesced within the discourse of 'net neutrality'— terminology that, despite its frequent usage as synonymous with 'network neutrality,' is important to distinguish as a more rhetorically targeted and specific discursive formation— they formed a discursive alliance that led a push for policy informed by the principle of network neutrality in the mid to late 2000s. Yet, they were opposed by phone and cable corporations such as Verizon and Comcast and supporters of deregulation that used 'net neutrality' to conjure images of overreaching and unnecessary government intervention that would stifle investment in broadband networks.

By the late 2000s, however, as the interests of technologists, online services, and advocacy groups began to overlap less, the coalition that came together around net neutrality began to splinter. The 'net neutrality' that gained traction in the policy sphere by 2010 was a very loosely translated version of the principle— the result of several levels of compromise between Google (representing online services) and Verizon (representing network operators), with little input from legal and technological specialists or advocacy groups. It is telling that policymakers tended to refer to principles of "internet freedom" and the policy that was enacted by the FCC was "Open Internet protections"— a discursive shift away from 'net neutrality' that represents more than mere semantics. Indeed, we can see through the historical genealogy of 'net neutrality' that while the principle itself solidified discursively, the embodiment of the principle in policy became significantly diluted.

The Discursive Construction of 'Net Neutrality'

Law scholar Tim Wu put forth the term "network neutrality" in his 2003 article "Network Neutrality, Broadband Discrimination" (2003). It is worth noting here that Wu's choice of words in this article is significant for the construction of the discourse that grew up around the term. "Neutrality" as a signifier brings with it important connotations of impartiality, equality, fairness, and justice that have proven to be powerful conceptual vehicles for this discourse.[2] Rather than introducing a new concept, though, Wu more than anything put a name to a long-standing principle that had informed the design and governance of the internet since its development and operation by the technologist community of computer scientists, network engineers, and telecommunications scholars. The principle that Wu describes as "network neutrality" in this article is closely related to the "end-to-end argument" that informed the early architecture and operation of the internet and common carriage regulations that governed the first generation of internet access providers (Saltzer, Reed, and Clark 1984). The universal and nondiscriminatory access to network content, services, applications, and devices that Wu refers to as "network neutrality" was a built-in consequence of the end-to-end infrastructure of the early internet and was once enforced by the common carriage regulations that applied to any transmissions over telephone lines, including dialup internet traffic. However, changes to the technical and institutional structures of the internet at the turn of the millennium brought with them more incentive and ability for network operators to discriminate among internet uses and fewer regulatory preventions against such practices.

"The end-to-end argument," first advanced by network engineers Jerome Saltzer, David Reed, and David Clark, emphasizes control by end-users of a network over those who manage

the core by building network infrastructures that provide only general services that can be used by any application, service, or device (1984). Legal scholars including Mark Lemley and Lessig began arguing in the early 2000s that by originally structuring the internet end-to-end, an "evolutionary model" of innovation was put into place (2000). By not discriminating in favor of any particular use, such a model created a relatively level playing field that enabled the sort of competition among applications, devices, and services that encouraged a wave of rapid and socially beneficial technological innovation. As Lessig puts it in *The Future of Ideas,* end-to-end networking like that of the early internet made network infrastructures a "commons" where the resources necessary to create and circulate content and applications were open and freely available (2001). The development and implementation of technologies like deep packet inspection, firewalls, and content filters, however, allowed for more control at the core of the network through the 2000s, which Lemley and Lessig lament as harmful to innovation and creativity on the internet (2000).

This control over network transmissions began to be exercised more aggressively and intrusively in the early 2000s, as many of the incentives to operate networks on an open and nondiscriminatory basis were removed during the transition from dialup to broadband internet access. First, as the internet access market grew broader and more commercial, the primary internet access providers became not nonprofit parties like universities and research institutes as in the early days of the internet, but rather profit-maximizing corporations. Further, as internet access came to be primarily provided over direct subscriber lines (DSL) and cables, rather than telephone lines, the FCC under the administration of George W. Bush in 2002 classified broadband internet access as an "information service" rather than a "telecommunications service" as defined by the Telecommunications Act of 1996.[3] As detailed in Chapter 3, this

classification removed many of regulations on network operators— including, importantly, 'common carriage' rules that were similar in intention and effect to network neutrality. 'Open access' regulations for network operators were also rescinded in this move, eliminating requirements for physical network infrastructure services to be unbundled to allow other firms to provide internet access services. The Supreme Court's 2005 ruling in *Brand X v. NCTA* upheld the FCC's decision and was the final determination that common carriage and open access regulations would not apply to internet infrastructures.[4]

With no regulatory protections against exploiting dominant incumbent market positions, then, the phone and cable companies that already owned and operated DSL and cable broadband networks effectively became the sole providers of high-speed wired internet access, creating a duopoly (one cable provider, one phone provider) in virtually every local market in the US by the mid 2000s (Goldfarb 2006). Further, phone companies that had historically been common carriers were joined in the broadband access market by cable companies accustomed to the 'electronic publisher' regulatory framework established by the *Midwest Video II* decision discussed in Chapter 1. With profit-maximizing motives and the technological capacities for discrimination in place, the removal of incentives for openness from that might have come either from regulatory protections or from a more competitive market meant that network operators began taking tighter control of internet transmissions. Indeed, during the early to mid 2000s there was a rise in discriminatory network management practices by internet access providers, such as AT&T, Comcast, and Cox, who in a number of cases blocked subscribers' access to devices and services like virtual private networks and home Wi-Fi networks (Wu 2003).

Network neutrality began as a technical principle for efficient network design. Wu's notion of "network neutrality" was a response to the situation of increasing technological discrimination

on broadband networks in the early 2000s. Wu proposed network neutrality as a principle to inform broadband nondiscrimination policy, which he explicitly opposed to calls for a return to 'open access' regulation of internet infrastructures, another position that was quite strong during this period. Advocates of reinstating open access rules for internet access networks argued that by again separating infrastructure management from service provision, competition in access services would be introduced back into the market, bringing with it incentives to provide neutral and nondiscriminatory internet access and more widely distributing the management of internet transmissions. However, Wu argued that if the ultimate goal is to encourage better internet access service, including openness and nondiscrimination in online content and services, then straightforward network neutrality rules inscribed in policy are a more effective solution than relying on indirect structural remedies such as open access. In many ways, Wu's "network neutrality" concept proposed to put openness and the "evolutionary model of innovation" back in place through policy rather than technology.

Wu's notion of network neutrality as the most efficient means to encourage innovation was drawn from the internet technologist community and his terminology was soon taken up there. We can see how this discourse serves the interests of many of those involved in designing and developing internet technologies: the assumption is that, because the internet was originally built to adhere to norms of openness and those now in control of the infrastructures that the network depends upon are not adhering to those norms, policy should be enacted to make openness standards mandatory. That is, because commercial internet access providers are not acting in accordance with the values scientists and engineers embedded in the design of the technologies (neutrality and nondiscrimination), many technologists would like to reinscribe those values through regulation of the technologies.

Within the technologist community, by the mid 2000s the question of how to govern internet transmissions increasingly came to be discussed through the discourse of "network neutrality." This can be seen clearly in public statements endorsing network neutrality policy from some of the most prominent computer scientists and network engineers: Vint Cerf, one of the inventors of the Internet Protocol; Tim Berners-Lee, the inventor of the World Wide Web; and David Reed, one of the founders of the end-to-end argument.[5] Network neutrality has not been uniformly supported by such prominent internet technologists, however: Bob Kahn, the other inventor of the Internet Protocol, and David Farber, a pioneer of distributed networking, both explicitly oppose network neutrality, seeing it as just "a slogan" and a threat to innovation in network infrastructures, respectively.[6]

The topic of network neutrality has been taken up by many other computer scientists, network engineers, and internet technology researchers, including: Clark (2007; with Bauer and Lehr 2009); Jon Peha (2006; with Lehr, Sirbu, and Gillett 2006; with Lehr and Wilkie 2007); Edward Felten (2006); Scott Jordan (2007, 2009, 2010, 2011; with Ghosh 2009, with Ghosh 2010); Daniel Weitzner (2006, 2007; et al. 2008); Douglas Sicker (with Shah and Hatfield 2003; with Grunwald and Lookabaugh 2006; with Grunwald 2007); and Andrew Odlyzko (2004, 2008, 2009, 2011; et al. 2012). The positions of these technologists on the issue are generally consistent with basic network neutrality principles. However, on the whole they temper this support for openness with the point that the internet has never been entirely neutral (e.g., Clark; Jordan; Peha), findings that some forms of traffic differentiation can be beneficial (e.g., Peha; Jordan; Sicker), and varying approaches to enacting network neutrality policies and/or practices. Most internet technologists seek to balance innovation in services at the edge and the core of the network and discourage unfair filtering or throttling while still leaving room for network

operators' traffic management techniques to deal with congestion and other problems.

Network neutrality discourse grew out of the technologist community to take on a different discursive formation: the more concise 'net neutrality.' More than simply an abbreviated version of the same exact notion, 'net neutrality' carries some small but important distinctions. For one, it is a bit pithier phrase that is slightly more publicly appealing and memorable, which has been important to its articulation to the allied discursive group that developed around it. Also notable is the move in terminology from general to specific: 'net neutrality' makes the issue a concern for the internet in particular, not a broadly-applicable design principle for any network architecture. This frames the issue in such a way as to hail any and all internet users to the discourse.

Beyond its consideration on technical grounds, net neutrality has seen a lot of attention across academic literature, with most of the examinations coming from scholars of economics and law. The issue has shown up frequently in law reviews throughout the 2000s, such as the *Federal Communications Law Journal*, the *Harvard Journal on Law and Technology*, the *Hastings Communications and Entertainment Law Journal*, and the *Journal on Telecommunications and High Technology Law*, as well as being a regular topic of presentation at the influential Washington, DC event, TPRC: The Research Conference on Communication, Information, and Internet Policy. A special issue of the *International Journal of Communication* in 2007, edited by Peha, William Lehr, and Simon Wilkie, brought together an interdisciplinary range of scholars to address the topic and the *Review of Network Economics* also devoted a special issue to it, edited by Marius Schwartz and Philip Weiser in 2009.

Economists who have considered net neutrality include Nicholas Economides (2006, 2008, 2011a, 2011b; with Tag 2012; with Hermalin 2012); Christiaan Hogendorn (2005, 2007, 2012);

Johannes Bauer (2007; with DeMaagd 2012; with Obar 2014); Gregory Sidak (2006, 2007, 2010); Gerald Faulhaber (2011, 2012; with Farber 2010); David Waterman (with Choi 2011); and Adam Thierer (2004; with Wendy 2010). One view is that network infrastructures are the private property of network operators and therefore net neutrality requirements would amount to government 'takings' in violation of the Fifth Amendment (Lyons 2011). The economics literature has for the most part, though, focused on judging the advisability of differential pricing schemes by network operators based on the comparative economic welfare of content providers or end-users subsidizing investments in network infrastructures (Economides and Tag 2007; Economides 2008; Economides and Tag 2011; Economides and Hermalin 2012; Musacchio and Kim 2009; Weisman and Kulick 2010; Lee and Wu 2009; Yoo 2008; Sidak 2006). Internet access providers see themselves operating in a 'two-sided market' where they provide access both from content providers to users and vice versa and revenues from both these sources can go into deploying and improving their networks. The primary economic argument against net neutrality is that access providers should be able to contract with content providers for guaranteed 'quality of service' and premium delivery, leading to potentially less cost for users for investment in network infrastructures (Sidak 2006; Weisman and Kulick 2010; Yoo 2008). However, these charges to content providers, other economists argue, can serve as 'termination fees' to reach users that favor established content providers and discourage new market entrants, incentivize unfair discrimination for content owned by or contracted with access providers, and could lead to investment only in premium network services at the expense of generally open public 'best effort' network services (Economides 2008; Hogendorn 2012; Lee and Wu 2009). These economic issues are covered further in Chapter 6.

Net neutrality's rise to prominence as an issue of academic concern stemmed primarily

from its discussion in the legal literature. Through the 2000s, a series of law journal articles on net neutrality appeared which marked the political economic contours of the heated debates in the policy and public spheres, led by the legal scholars: Wu (2003, 2004, 2007; with Yoo 2007; with Lee 2009); Barbara van Schewick (2007, 2010, 2012; with Frischmann 2007; with Farber 2009); Christopher Yoo (2004, 2005, 2006, 2007, 2008, 2010; with Wu 2007); Rob Frieden (2006, 2007a, 2007b, 2008); Weiser (2008; with Farrell 2003; with Atkinson 2006); Crawford (2007, 2009, 2013); Barbara Cherry (2006, 2008, 2011); and Chris Marsden (2008, 2010; with Cave 2007).

The net neutrality debate took its most explicit form in a series of exchanges between van Schewick (with Frischmann 2007) and Wu (with Yoo 2007), with Yoo, the most outspoken economic opponent (2005; 2006). Yoo argues that allowing network operators to offer a variety of specialized access services for their own content and through contractual agreements with content providers, what he calls "network diversity," can introduce more competition into the broadband market (2005; 2006; with Wu 2007; 2008). Van Schewick (with Frischmann 2007) and Wu (with Yoo 2007) argue that in a highly concentrated market for broadband access, dependent only on facilities-based competition, network operators vertically integrating content with access services have strong incentives to engage in anticompetitive discrimination and exclusion or seek 'monopoly rents' from independent content providers, which distorts the content market and can encourage network operators to not expand broadband capacity but maintain bandwidth scarcity. Much of this debate was encapsulated by van Schewick in her *Internet Architecture and Innovation,* in many ways the definitive book on net neutrality as a technical and economic issue (2010).

Internet application and service providers like Google, Amazon, Yahoo!, eBay, and

Microsoft had also been discussing the need for broadband access regulations since the FCC's broadband classification in 2002 and they soon began to call for 'net neutrality.'[7] These content providers adopted the version of the discourse that expanded beyond innovation and technological development to become more closely articulated to economic matters of free markets and consumer choice. From the perspective of the discursive site of Silicon Valley, net neutrality became about ensuring a fair marketplace where no online applications or services have a discriminatory advantage from network operators, leaving internet users to decide what content succeeds.[8] With this, a neutral network is in the interests of online content providers as a way to assure their control of the content made available online, therefore maintaining their ability to profit from its circulation without letting network operators get a cut. Open network design inverts the power relations of production and distribution typical to traditional media systems, where distributors' control of content delivery infrastructures gives them leverage over content producers who must rely on these closed networks to reach consumers. Much of the conflict in net neutrality debates, then, has been a struggle between the largest content providers like Google and Amazon and the largest access providers such as Verizon and Comcast over the latter's ability to assert more control over and profit extraction from the products of the former. Internet access providers' battles with internet application providers have been especially heated over VoIP and streaming video services, which threaten their incumbent dominance over phone and cable services (Clark 2007).

By 2005, several conspicuous instances of material and clearly threatened discriminatory network management practices began to spark some public attention. Incidents such as telecom company Madison River blocking access to the VoIP service Vonage, Canadian internet access provider Telus blocking access to their workers' labor union website during a lockout, AT&T

CEO Ed Whitacre's quickly notorious "ain't going to let them use my pipes for free" interview, and Verizon executives complaining of Google's "free lunch" were picked up by the press and major blogs, giving more visibility to the issues.[9]

The discourse of net neutrality began to rise to public prominence in 2005 and 2006, not only at the hands of technologists, legal academics, and content providers, but largely led by media advocacy groups. At the forefront of this movement was the Save the Internet campaign, launched in 2006 by the media reform organization Free Press to push for net neutrality policy. At that point, the coalition included many citizen and media advocacy groups in the US— from the American Civil Liberties Union, the Consumers Union, and the American Library Association to Public Knowledge, the Media Access Project, and Reporters Without Borders— as well as a wide range of interest groups from Left to Right— from MoveOn.org, the Service Employees International Union, and the Feminist Majority, to the Gun Owners of America, the Christian Coalition of America, and the Parents Television Council.[10] These advocacy groups expanded the discourse of 'net neutrality' to address people not just as internet users or consumers, but as citizens: here, net neutrality became articulated to issues like freedom of expression, civic engagement, and political participation.[11] This is where we began to see the images of gatekeepers, tollbooths, and tiers used as rhetorical devices to represent the troubles apparent in discriminatory network management practices. Public interest campaigns such as Save the Internet were able to successfully sell the issue in these powerful social and political terms to enlist larger public support for network neutrality principles and a push for such policy. The dynamics of this are covered in Chapter 4.

While most of the early academic literature on net neutrality focused on technical and economic concerns such as innovation, growth, competition, and efficiency, the scholarly

discourse surrounding the issue broadened to matters of the public interest and democracy. Scholars such as Brett Frischmann (2007, with Lemley; with van Schewick 2007; 2008), Crawford (2007), Hogendorn (2012), Frieden (2008), and Wu (2006) argue that net neutrality cannot be understood as a simply economic matter of maximizing efficiency. In nonetheless economic terminology, these scholars cite the 'network externalities' of the internet that benefit society in general, in ways that cannot be reflected in surpluses to be captured, through 'spillovers' like social inclusion and civic engagement (Frischmann and Lemley 2007; Frischmann 2008; Crawford 2007; Hogendorn 2012).

Net neutrality increasingly came to be seen as a First Amendment issue in scholarly discourse, led by scholars such as Nunziato (2008, 2009, 2010), Marvin Ammori (2009, 2012), Cherry (2006, 2010), Crawford (2007), Wu (2003, 2004), Jack Balkin (2008a, 2008b), Herman (2008), Frischmann (2008), Frieden (2008), Anthony Varona (2009), Moran Yemini (2008), Jennifer Newman (2008), and Randolph May (2007). Underlying this perspective on net neutrality is the premise, as particularly crystallized by Crawford (2007), that as the internet has become the dominant means through which people communicate publicly, policy that shapes access to and participation with internet technologies shapes the possibilities for free speech available to citizens. This view focuses on freedom of expression not as an abstract constitutional principle or the absence of government 'prior restraint' but as a concrete practical matter of control over the infrastructures necessary for expression (Crawford 2007; Balkin 2008b; Wu 2010).

Net neutrality has primarily been understood as a First Amendment issue in the sense that it protects users' freedom to communicate on the internet, in ways beneficial for democratic participation, diversity of views, and individual liberty (Crawford 2007; Wu 2004, 2006; Herman

2008; Yemini 2008; Balkin 2008; Newman 2008). Much of the civic discourse, although not in these terms, sees net neutrality as a matter of structuring a more inclusive and participatory democratic public sphere on the internet. Nunziato provides the most well developed consideration of net neutrality as a matter of free speech in her book *Virtual Freedom*, where she shows how network operators' blocking internet content amounts to censorship (2009). This form of censorship by corporations has been allowed, Nunziato finds, due to courts' recent First Amendment rulings that have eroded free speech from an 'affirmative' right to a 'negative' one— guaranteeing not actual freedom to speak, but merely freedom from government censorship (2009). Indeed, the argument that net neutrality is an unconstitutional violation of internet access providers' First Amendment rights has been asserted by opponents of such policies. This line of thinking has been forwarded most notably by May (2007) and Laurence Tribe (with Goldstein 2009), who argue that net neutrality amounts to 'compelled speech' and that network operators act as electronic publishers of internet content who therefore have the First Amendment rights to 'edit' the internet as they see fit. This argument has been brought up by other scholars, such as Nunziato (2009), Ammori (2009), and Cherry (2010), more so as a warning against, rather than defense of, the elevation of free speech for post-*Citizens United* 'corporate persons' over those of actual people. Such issues of democratic communications and free speech come up in particular in Chapter 3 and in the Conclusion.

Acting as a bridge between this academic discourse on net neutrality and the public interest discourse from media advocacy groups were public intellectuals like Lessig, Wu, and Robert McChesney. Lessig and Wu were the earliest and loudest voices in supporting net neutrality policy and McChesney appeared in his role as co-founder of Free Press. In addition to testifying before Congressional and administrative hearings related to the matter along with many of the

other specialists named above, these three in many ways served as spokespeople for net neutrality in newspaper op-eds, blog posts, and interviews with various news media outlets.[12] The case they made on behalf of net neutrality consisted of many of the same technical, economic, and political arguments from academic discourse, although translated into advocacy with expectedly more rhetorical flourish, less nuance, and more explicit calls for specific policy goals. After this point, though, 'net neutrality' began to take on different formations.

Discursive Shifts for 'Net Neutrality'

By 2006 an allied discursive bloc of technologists and academics, online content and service providers, and advocacy groups had come together around the discourse of 'net neutrality,' by then understood as a matter of technological, economic, and civic importance. The discourse fully blossomed in the public sphere at that point: 'net neutrality' became a widely heard term and the issue was covered regularly in the press, on cable news, and on social media including blogs and YouTube videos. Around that time, proceedings at the FCC and the FTC dealing directly with network neutrality issues were joined by several 'net neutrality' bills introduced into Congress.[13] Supporters by this point were paying close attention to these events in the policy sphere, culminating perhaps most prominently in the quick infamy of Sen. Ted Stevens' declaration that "the internet is a series of tubes" during a congressional committee debate.[14]

The term 'net neutrality' felt the stress of being a popular buzzword and rallying point for many different interests. For one, its technical origins haunted it in the public sphere, as it comes across in many ways as too wonky and oblique to call forward the major social and political concerns that have become attached to it. Other terminology was attempted, such as referring to net neutrality as "the First Amendment of the internet" and saying it is essential to ensuring a

"democratic internet."[15] Some prominent net neutrality supporters even explicitly called for a "rebranding," most notably Arianna Huffington, who called the term 'net neutrality' "marketing death" and looked for something that she hoped would better "capture the public imagination."[16]

The phrase 'internet freedom' popped up around this time and became key to the discourse of net neutrality as it developed in the public sphere, manifesting most importantly in the FCC's first official forays into network neutrality policy: the Internet Freedom guidelines and the Internet Policy Statement of 2005.[17] In 2004, then-Chairman of the FCC Michael Powell introduced what he called (echoing President Franklin Delano Roosevelt's "Four Freedoms" from World War II) the four "Internet Freedoms:" the "freedom" to access content, run applications, attach devices, and obtain service plan information.[18] In 2005, Powell's successor Kevin Martin, adapted these "Internet Freedoms" into the Internet Policy Statement, with a notable translation of the user from citizen to consumer, and an important caveat: here "consumers" are "entitled" to the content, applications, and devices of their choice, along with competition in the marketplace, all subject to "reasonable network management practices."[19]

Importantly, however, the FCC's Internet Policy Statement is simply a set of guidelines and is not enforceable regulatory policy. It was issued in the midst of advocacy groups' concerns over mergers in the telecom industry and the lack of regulatory oversight resulting from the FCC's reclassification of internet access. Issuing this statement was the agency's way to appease net neutrality supporters and divert attention from its actual deregulation of the internet access market. Nonetheless, it was the FCC's first official recognition of network neutrality principles, making it a touchstone for net neutrality discourse— one that notably refers to these principles of "internet freedom" and features the repetition of its stated purpose to preserve and promote the "open internet."[20]

Following the 2005 Internet Policy Statement and building on the broadly defined technical, economic, and political discourse of net neutrality, 'open internet' began to become very significant as a discursive formation. 'Open' signifies concepts that hold great power for public support for the issue of net neutrality: gaining access, being communicative and receptive, connotations of being 'open to the public' and 'open for business,' and conjuring images of unblocked, unobstructed, unrestricted passageways and unlimited, unenclosed expanses.[21] While it has not wholly replaced 'net neutrality' in public discourse, the phrase 'open internet' has played an important part in the discursive construction of the issue in institutional and regulatory contexts especially— for example, it provided the name for the Open Internet Coalition, the advocacy group representing online content providers.[22]

'The open internet' has been an especially prominent discursive formation in the policy sphere, beginning with the FCC's 2009 Notice of Proposed Rulemaking for Open Internet Protections ("Open Internet NPRM").[23] This document, issued by the FCC in its first year under the Obama administration, opened the Commission's proceedings for drafting binding net neutrality regulations. This was expected given that President Obama made net neutrality a signature issue at the FCC. As a presidential candidate in 2008, Obama tapped into the popular appeal of net neutrality through a campaign promise to enact it as policy.[24] The proposal for rulemaking initiated proceedings that explicitly built on the Internet Freedom recommendations for the broadband industry under the Bush FCC, and therefore adopted much of that language.

The Open Internet NPRM clearly demonstrated that, at the policymaking level, the net neutrality issue was officially rebranded as one of "protecting the open internet." The word "open" appears 255 times in the NPRM's 107 pages, while the word "neutrality" shows up only 47 times and every single instance is either a quotation or a footnote referring to the word's

usage elsewhere.[25] This clearly conscious effort to shift the discourse was an understandable rhetorical strategy for the FCC in its goal of passing net neutrality regulations: any stakeholders that engaged in the policymaking arena on the issue were forced to take up the discourse through these particular terms. At the level at which the policy decisions were made, the issue became defined foremost by characteristics such as openness and freedom, which seem so unassailable as to make support more agreeable.

The risk of steeping an issue so fully in terminology generally revered across so many contexts is that it can prove especially susceptible to being recontextualized. Notions like 'open' and 'free' are quite open and free themselves to be applied however a particular interest wishes. This proved true for 'open internet:' the efforts of net neutrality advocates and the FCC to articulate 'openness' and 'freedom' to regulatory policy were countered strongly by phone and cable companies, along with their neoliberal and Right-libertarian sympathizers in think tanks like the Cato Institute, the Heritage Foundation, and the Progress and Freedom Foundation, who worked to articulate the issue to 'open' markets that are 'free' from government regulation. [26] With the discursive formation of 'open internet,' then, the discourse of net neutrality grew wide enough to be used as an instrument of potential policy change— though perhaps too blunt an instrument.

Tensions in the discursive alliance that came together around net neutrality began to grow as understandings of the issue changed and the contexts around it shifted. The soundbite demands of enlisting public support for net neutrality as a mainstream political issue saw the rhetoric of advocacy groups grow more reductive. As tends to be the case for social movements, the discourse that drives them becomes simplified so as to absorb as many different interests as possible and incite action on the issue. The shift to talking less about the specific issue of 'net

neutrality' and more about the vaguer ideas of 'internet freedom' and 'the open internet' was in some ways a part of this process.

At the same time, the discourse from technologists and academics increasingly moved to more nuanced discussions of the issue. Scholars such as Sandvig (2006; 2007), Frieden (2006; 2007; 2008), and Felten (2006; 2008) generally support network neutrality but framed it as a matter of principle which brings with it complications and complexities when embodied in policy. They find that there is no such thing as pure network neutrality and that it perhaps works better as governance principles rather than as strictly binding regulatory rules that could bring with it unintended consequences. Other scholars, such as Weiser (2006, with Atkinson; 2008) and Marsden (2010a) have proposed what they see as more balanced policy solutions. For Weiser, a "third way" on net neutrality would allow network operators to differentiate broadband services but would emphasize stronger regulatory oversight to curb discriminatory abuses and encourage the growth of the open public internet (2006, with Atkinson; 2008). Marsden, the most prominent European net neutrality scholar, suggests a "co-regulatory" approach for the more competitive internet access market in Europe that is neither 'command-and-control' government regulation nor industry self-regulation, but works by setting broad standards for reasonable network management and requiring transparency in specific traffic management practices to see if they line up (2010a).

The terminology of 'open internet' and 'internet freedom' was picked up by some net neutrality scholars. Adam Candeub (2012, with Daniel McCartney) makes a distinction between net neutrality and the 'open internet,' writing that openness does not necessarily mean neutrality: in a reality where all networks inevitably differentiate traffic, he posits, equality of treatment is not as important as equality of outcome. Further, much of what net neutrality is invoked to

protect is not purely about nondiscrimination, but often as much about data privacy and communications reliability (Candeub and McCarney 2012). By proposing a role for net neutrality to play in a larger concept of 'internet freedom,' Sascha Meinrath and Pickard (2008a; 2008b) similarly link network neutrality principles to many other related issues. Meinrath and Pickard connect net neutrality with open access, common carriage, privacy, and open standards and protocols to propose a more comprehensive vision of internet infrastructure policy (2008).

As the problem of blocking and filtering internet traffic around the world became of greater concern through the 2000s, the issue was variously discussed as 'net neutrality,' 'open internet,' and 'internet freedom.' Milton Mueller made the suggestion to explicitly link censorship by corporate network operators to censorship from authoritarian governments under the discourse net neutrality, using it as a principle for global internet governance. The point that censorship from governments and corporations should be addressed as equivalent is an important one and the English phrase 'net neutrality' was taken up in some talks at intergovernmental summits and global governance forums and in the work of some civil society groups in the EU, Japan, and South Korea, in particular.[27] Discussion of global internet censorship and surveillance, however, more so took up the discursive formations of the 'open internet' and, especially, 'internet freedom.' The ongoing collaborative research monitoring internet censorship and surveillance around the globe led by John Palfrey, Ron Deibert, Rafal Rohozinski, and Jonathan Zittrain (2008; 2010; 2011) takes as its name the OpenNet Initiative. 'Internet freedom' was an especially prominent discourse through which to discuss global internet censorship and surveillance, as represented in the work of Rebecca Mackinnon (2012), Evgeny Morozov (2011), and think tanks like the New America Foundation. 'Internet freedom' discourse found its most visible venue in efforts by the US State Department to encourage free speech rights online in

authoritarian nations, especially in light of the role of internet usage in organizing and sustaining the democratic revolutions of the Arab Spring in the Middle East and North Africa that began in 2010 and the attempts by those repressive regimes to restrict or block internet access. Perhaps the defining moment of the US government's global internet freedom campaign came with Secretary of State Hillary Clinton's "Internet Freedom" speeches of 2010 and 2011.[28]

Academic discourse also saw a strong reemergence of open access as a possible means of achieving network neutrality. Discussions of open access show up frequently in comparative studies of broadband networks around the world, as open access regulations requiring 'unbundling' or 'functional separation' of network operations from access services and competitive 'line-sharing' are very common across developed nations. Calls for open access requirements for next-generation broadband networks like fiber and wireless in the US grew in large part due to the results of the Harvard Berkman Center for Internet & Society's transnational comparative study of broadband network infrastructures, commissioned by the FCC as background for the National Broadband Plan and released in 2010. The Berkman study, led by Benkler, found that open access policy played a key role in both the deployment of the best performing broadband networks and encouraging the most competitive marketplaces for access services, especially in Japan and the European Union (et al. 2010). The advanced and competitive environments in these areas, open access advocates argue, work for net neutrality by eliminating the bottlenecks and natural monopolies of network infrastructures that can be manipulated for anticompetitive advantage and private censorship.

The coalition that formed in support of net neutrality began to splinter as the FCC moved forward with the Open Internet proceedings and several more ultimately unsuccessful legislative attempts were introduced in Congress. In the midst of the hyper-partisan Republican reception to

any goals of the Obama administration, net neutrality came to be seen by conservatives no longer as a bipartisan free speech issue but more as a signature Democratic issue to be obstructed. Indeed, Tea Party discourse was able to reframe nondiscrimination regulations as a "Marxist takeover of the internet" by the Obama administration.[29] As the issue became more politically divisive in the US surrounding the 2010 Congressional elections, the Save the Internet coalition lost some members, most prominently the Gun Owners of America.[30] This discursive framing as dangerous government intervention clearly serves the interests of the network operators that were able to employ and exploit the renewal of Right-libertarian fervor by the Tea Party movement to serve their deregulatory neoliberal interests.

In many ways, the cornerstone of the discursive alliance built around net neutrality was the advocacy of powerful online service corporations such as Amazon, Skype, and Facebook, and led by Google. However, as Google's interests in particular began to diverge from those of the technical or media reform advocates of net neutrality, Google's definition of the principle came to differ significantly from technologists and advocacy groups.' By the late 2000s, in fact, Google's translation of net neutrality had more in common with Verizon— one of the biggest internet access providers, but also by that point Google's close business partner in the Android mobile device project. Verizon had claimed along the way that it had no problem with network neutrality in principle but was just opposed to heavy-handed net neutrality policy, preferring voluntary self-regulation. The definition of 'network neutrality' that Verizon said it supported, however, is particularly circumscribed— applying to the "open internet," of course, but in this usage implying the existence of another closed internet.[31]

Google and Verizon were leaders in the FCC's closed-door negotiations in 2010 between corporations with the biggest financial stakes on either side of the net neutrality issue. After

breaking off from these talks, as detailed in Chapter 4, Google and Verizon negotiated a voluntary agreement between themselves that they intended to serve as a framework for net neutrality governance.[32] At the core of the 'Googizon' compromise is 'openness' for 'the public internet,' but not for the "differentiated services" that could become *de facto* 'private internets,' open only to network operators and the content providers with whom they have exclusive deals. In this accord, Google met Verizon much further than halfway, committing itself— and by extension, the rest of the discursive alliance in support of net neutrality that it once led— to a greatly weakened position in the net neutrality debate. The Googizon agreement on 'open internet protections' quickly became the accepted solution in the policy sphere, as this highly compromised definition of the network neutrality principle was enshrined in the regulations adopted in the FCC's Open Internet Order of 2010.

'Internet freedom' discourse by 2012 strongly influenced political discussions both domestically and globally. Advocacy groups and growing numbers of the public came to understand the relations between net neutrality and other internet policy issues including intellectual property, privacy, and digital inclusion through an 'internet freedom' discourse that articulated them together. This came to a head in large part in response to the 'anti-piracy' policy measures of the Stop Online Piracy Act (SOPA) and PROTECT IP Act (PIPA) in US Congress and the Anti-Counterfeiting Trade Agreement (ACTA) between numerous developed nations, proposed between 2010 and 2011, which would have instituted international regimes of blocking, filtering, and surveillance online in the name of enforcing copyrights and trademarks.[33] SOPA, PIPA, and ACTA policies were for the most part defeated due to popular resistance in the name of internet freedom, protests which were led by many of the largest online content providers, including Wikipedia, Reddit, and Google, blacking out their sites on January 18,

2012.[34] The organizers of these online protests made their demands clear in July 2012 when they released the "Declaration of Internet Freedom," a document that laid out broad principles that run across internet policy issues: "expression, access, openness, innovation, privacy."[35] The Declaration circulated widely online, gaining a variety of signatories and responses, and quickly sparked a rival "Declaration of Internet Freedom" from Right-libertarian groups that defined the matter more as negative freedom from government intervention.[36] 'Internet freedom' was also taken up that same summer by the United Nations, as the UN Human Rights Council released its first resolution extending human rights to internet users and recognizing freedom of expression online.[37] While it represented an important step forward and the resolution was signed by every UN country, it was a vaguely sketched vision of internet freedom with much wiggle room and lacks the enforcement teeth to hold accountable nations that continue to censor their citizens online. While 'openness' and 'freedom' have shown influence as keywords in net neutrality discourse, the contested meanings within them dilute some of the values of net neutrality principles. Net neutrality discourse— even if troubled— can still stand for something.

Net neutrality principles and discourses

That broadband access policy loosely based in the principle of 'net neutrality' was adopted by the FCC in 2010 speaks to the powerful discursive alliance of technologists, online service providers, and advocacy groups that came together in the 2000s; that the policy ultimately enacted by the end of the decade was, in fact, deeply compromised "Open Internet protections" speaks to the contingent and contested nature of discursive construction and the fragile existence of articulation of interests in such a discursive alliance. The discursive construction of 'net neutrality' linked the term to technical, economic, and civic discourses that brought in wide

support. As with all keywords, though, the meaning of 'net neutrality' is defined in struggle: it increasingly became linked to discourses of excessive government intervention and unintended consequences. By the end of the 2000s 'net neutrality' was too loaded a term to make headway in the policy sphere, packed with contested meanings, positive and negative connotations, and a great deal of often intentional confusion. By that point, the discursive alliance of technologists, online service companies, and advocacy groups disarticulated, as the shared interests that were once absorbed into the discourse of 'net neutrality' slid apart. What followed was a shift to "protecting the open internet," the rearticulated discursive construction resulting in a compromised set of FCC regulations that remain as close as the US has come to network neutrality policy. Further, net neutrality discourse has become increasing articulated to the discourse of 'internet freedom,' especially in regard to transnational issues.

It is important to note that net neutrality rules were only able to gain traction in the policy sphere domestically and transnationally once they became associated with 'open internet' and 'internet freedom.' These vague terms constructed a usefully open vessel for the deeply compromised version of net neutrality that was able to get barely enough grudging support from stakeholders to be passed as the FCC's Open Internet protections. While the rhetorical shift to such unassailable discourses as 'openness' and 'freedom' may have been necessary to achieve 'net neutrality' policy, it also played a crucial role in watering actual policy down to the point of enforcing very little of the principle of net neutrality. The difference between 'net neutrality' and 'protecting the open internet' is not merely one of semantics, but lies at the core of a deviation in values. This discursive shift, from support for 'net neutrality' by a broad discursive alliance to the enactment of 'open internet protections' that serve powerful interests more than others brought with it real material consequences for internet users today and in the future.

The connection of net neutrality to the broader discourse of 'internet freedom' is an ambiguous development. One the one hand, some of the specificity of net neutrality issues is lost and 'freedom' poses its own challenges for understandings, as seen in disagreements over its definition from Right to Left in the US and authoritarian to democratic nations in global governance. However, 'internet freedom' as a discursive construction does have the potential to be a rhetorically powerful way of connecting the public interest across related internet policy issues and could help shift net neutrality discourse toward the image of a global democratic public sphere. Ultimately, though, a keyword like 'freedom' brings with it a great struggle over meaning. Indeed, looking at documents such as the competing "Declaration[s] of Internet Freedom" from the Right and the Left mentioned above reveal how the contested meanings of 'freedom,' invoking either positive liberty or negative liberty (Berlin 1956), may merely muddy the waters necessary to swim toward progressive media reforms like net neutrality.

I assert that framing equality of use of internet infrastructure as a matter of 'openness' rather than 'neutrality' brings with it a different set of connotations that may actually conflict with the goals and values of net neutrality as a principle. 'Neutrality,' conjured perhaps most vividly through the symbol of Switzerland, implies a political commitment to be impartial.[38] In this sense, 'neutrality' represents an affirmative choice to act fairly and in an unbiased manner. This aligns 'neutrality' with justice and equity in a way that 'openness' is not. While 'open' is associated with an unprejudiced position and a lack of restrictions, it also tends to imply 'unresolved,' in the sense that a matter is 'left open.'[39] An active affirmation of neutrality contrasts with this negative sense of 'openness' as merely leaving something alone. In this way, discursively, an 'open internet' works as a weaker goal than a 'neutral network' because it still seems unsettled— we may get an open internet in the sense that it has not been closed *yet*. In

calling to mind a binary existence with ‘closed,’ ‘open’ implies that the internet is being allowed to stay open although is likely to be closed.

The shift toward ‘open internet’ is important not just for the meanings conjured by the term, but also for the move away from ‘net neutrality’ that it represents. As we have seen above, the phrase ‘net neutrality’ was by 2009 all but abandoned in the official policy sphere, even though the term continued to carry surprising currency in popular and industrial discourse. We can understand this as an example of a “media policy silence” as described by Freedman (2010). When the FCC took up ‘net neutrality’ policy it did not call it ‘net neutrality policy’ but rather “Internet Freedoms” and “Open Internet protections.” In doing so, the Commission sought to move away from the ‘politicized’ discourse that ‘net neutrality’ had become to avoid the conflicts within it. As net neutrality came to be associated with affirmative progressive media reform through the efforts of media advocacy groups, it further became reframed by phone and cable companies as overbearing government intervention. When the FCC moved forward with broadband access regulations, it sought to disarticulate its policy from this discourse altogether and rearticulate it to a more flexible discursive vehicle for what it saw as necessary compromises. In doing so, however— by silencing the discourse of net neutrality in the official policy sphere— the FCC left aside much of the substance net neutrality held as a principle.

Looking strictly at the outcome of regulations lacking the potency of actual net neutrality, we can infer how this discursive shift had consequences. The telecom industry and FCC policymakers pushed the debate away from net neutrality’s technical, economic, and civic principles, which resulted in Open Internet rules which have been commonly understood as net neutrality policy but are actually far from net neutrality principles. Through the course of the rest of this dissertation we will see how this disconnection between principle and policy has opened

the door to practices inconsistent with values of equality and fairness. At this point, though, it is important to note how the discourse of 'net neutrality,' warts and all, remains powerful, if for no other reason than that it has resonated with people as a vision for more equitable media structures and animated people to pay attention to internet infrastructures and communications policy and fight to make them better.[40] Uncovering more of the discursive history behind 'net neutrality' can help us understand how it works, why, and what might be done with it in the future. Doing this takes digging into some of the more specific terminology that underlies net neutrality principles, policies, and practices. That is the subject of the following chapter.

Notes

[1] See, for example, Farber's arguments in van Schewick and Farber (2009).

[2] See: "neutrality, n.," *OED*, 3rd ed., Oxford University Press (2003).

[3] Cable Modem Order, 17 FCC Rcd. 4798 (2002), http://askcalea.fbi.gov/archives/docs/20020315.fcc.02-77.pdf

[4] *NCTA v Brand X*, 545 US 967 (2005), http://www.law.cornell.edu/supct/html/04-277.ZS.html.

[5] See, for example: Alan Davidson, "Vint Cerf speaks out on net neutrality," *Google Official Blog*, November 8, 2005: http://googleblog.blogspot.com/2005/11/vint-cerf-speaks-out-on-net-neutrality.html; Vinton G. Cerf, "Prepared Statement to US Senate Committee on Commerce, Science, and Transportation Hearing on 'Network Neutrality,'" February 7, 2006: http://commerce.senate.gov/pdf/cerf-020706.pdf; Tim Berners-Lee, "Net Neutrality: This is serious," Decentralized Information Group, MIT Computer Science and Artificial Intelligence Laboratory, June 21, 2006: http://dig.csail.mit.edu/breadcrumbs/node/144; Berners-Lee, "The Neutrality of the Net," Decentralized Information Group, MIT Computer Science and Artificial Intelligence Laboratory, May 2, 2006: http://dig.csail.mit.edu/breadcrumbs/node/132; Vinton G. Cerf, Stephen D. Crocker, David P. Reed, Lauren Weinstein, and Daniel Lynch, "Open Letter to FCC Chairman Julius Genachowski," Open Internet Coalition: http://www.openinternetcoalition.org/files/FCC_NN_Letter_Cerf.pdf; van Schewick, "Towards an Economic Framework for Network Neutrality," Journal on Telecommunications and High Technology Law 5 (2007): 329-391; Frischmann, "An Economic Theory of Commons and Infrastructure Management," Minnesota Law Review 89 (2005): 917-1030; Crawford, "The Internet and the Project of Communications Law," UCLA Law Review 55 (2007): 359.

[6] Ed Feigenbaum, "Computer Pioneer Robert Kahn," video, Computer History Museum, *YouTube*, 15 November 2007, https://www.youtube.com/watch?v=t3uTKs9XZyk; Farber, David, and Michael Katz. "Hold Off On Net Neutrality." Editorial. The Washington Post. 19 Jan. 2007. Web. 03 July 2014. http://www.washingtonpost.com/wp-dyn/content/article/2007/01/18/AR2007011801508.html.

[7] See, e.g.,:"Net Neutrality," Blog post, Google Policy Blog: http://googlepublicpolicy.blogspot.com/search/label/Net%20Neutrality; Eric Bangeman, "Amazon exec: net neutrality necessary because of 'little choice' for consumers," *Ars Technica*, May 12, 2006:

http://arstechnica.com/uncategorized/2006/05/6817-2/; Mario Armstrong and Farai Chideya, "Net Neutrality Battle Goes to Washington," *NPR*, June 26, 2006: http://www.npr.org/templates/story/story.php?storyId=5511150; "Net Neutrality," Blog post, *eBay Main Street*: http://www.ebaymainstreet.com/issues/net-neutrality; Declan McCullagh, "eBay tries e-mail in Net neutrality fight," *CNET News*, June 1, 2006: http://news.cnet.com/eBay-tries-e-mail-in-Net-neutrality-fight/2100-1028_3-6079291.html; McCullagh, "Microsoft's new push in Washington," *CNET News*, June 30, 2003: http://news.cnet.com/2010-1071_3-1021938.html; Tom Keating, "Amazon, Google, Yahoo, eBay fight for net neutrality with letter to Congress," TMCnet, July 13, 2006: http://blog.tmcnet.com/blog/tom-keating/news/amazon-google-yahoo-ebay-fight-net-neutrality-with-letter-to-congress.asp.

[8] See, e.g.: Eric Schmidt, "A Note to Google Users on Net Neutrality," Blog post, *Google Policy Blog*, 2006: http://www.google.com/help/netneutrality_letter.html.

[9] Jonathan Krim, "FCC Probes Blocking of Internet Phone Calls," *The Washington Post*, February 16, 2005: http://www.washingtonpost.com/wp-dyn/articles/A31082-2005Feb16.html; Cory Doctorow, "Phone company blocks access to telecoms union's website," BoingBoing, July 24, 2005: http://boingboing.net/2005/07/24/phone-company-blocks.html; Ken Fisher, "SBC: ain't no way VoIP uses mah pipes!," *Ars Technica*, October 31, 2005: http://arstechnica.com/old/content/2005/10/5498.ars; Arshad Muhammed, "Verizon Executive Calls for End to Google's 'Free Lunch,'" *The Washington Post*, February 6, 2006: http://www.washingtonpost.com/wp-dyn/content/article/2006/02/06/AR2006020601624.html.

[10] On the Internet Archive we can see the list of members shortly after its founding and at the height of its bipartisan support: The Internet Archive Wayback Machine, "Join Us," *Save the Internet*, October 12, 2007: http://web.archive.org/web/20071012025915/http://www.savetheinternet.com/=coalition. For the current list of supporters, see: "Join Us," *Save the Internet*: http://www.savetheinternet.com/members.

[11] See, e.g.: "Statement of Principles," *Save the Internet*: http://www.savetheinternet.com/statement-principles; "Join the Fight for Internet Freedom," *Free Press*: http://www.freepress.net/savetheinternet; "Future of the Internet," *Free Press*: http://www.freepress.net/media_issues/internet.

[12] Lessig, Lawrence, and Robert W. McChesney. "No Tolls on The Internet." Editorial. *The Washington Post*. 08 June 2006. Web. 01 July 2014. http://www.washingtonpost.com/wp-dyn/content/article/2006/06/07/AR2006060702108.html.

[13] The FCC's approach to net neutrality is covered at length through the course of this dissertation. The FTC's most substantive engagement with net neutrality was its 2007 Broadband Connectivity Competition Report, in which it "urged caution" on regulation. See: Report, Broadband Connectivity Competition Policy, FTC (2007), http://www.ftc.gov/sites/default/files/documents/reports/broadband-connectivity-competition-policy/v070000report.pdf. Attempted legislation in Congress has included: the Internet Freedom and Nondiscrimination Act of 2006; the Net Neutrality Act of 2006; and the Internet Freedom Preservation Acts of 2007, 2008, and 2009. For a complete list and links to the text of these bills, see "Net Neutrality in the United States: Attempted Legislation," Wikipedia (2014), http://en.wikipedia.org/wiki/Net_neutrality_in_the_United_States#Attempted_legislation.

[14] For an example of how these comments were taken up in the online public sphere, see "DJ Ted Stevens Techno Remix: 'A Series of Tubes,'" Video, 13tongimp, *YouTube*: http://www.youtube.com/watch?v=EtOoQFa5ug8.

[15] See, e.g.: Evan Derkacz, "Markey introduces Net Neutrality Act: The fight for the First Amendment of the Internet is on," Blog post, *AlterNet*, May 2, 2006: http://www.alternet.org/story/35728//; Adam Cohen, "Why the Democratic Ethic of the Web May Be About to End," Editorial, *The New York Times*, May 28, 2006: http://www.nytimes.com/2006/05/28/opinion/28sun3.html; "Keeping a Democratic Web," Editorial, *The New York Times*, May 2, 2006: http://www.nytimes.com/2006/05/02/opinion/02tue3.html.

[16] Arianna Huffington, "'Net Neutrality:' Why Are the Bad Guys So Much Better at Naming Things?," Blog post, *The Huffington Post*, May 3, 2006: http://www.huffingtonpost.com/arianna-huffington/net-neutrality-why-are-th_b_20311.html.

[17] Internet Policy Statement, 20 FCC Rcd. 14986 (2005), https://apps.fcc.gov/edocs_public/attachmatch/FCC-05-151A1.pdf.

[18] Michael Powell, "Preserving Internet Freedom: Guiding Principles for the Industry," Speech, Silicon Flatirons Symposium on The Digital Broadband Migration: Toward a Regulatory Regime for the Internet Age, University of Colorado Law School, Boulder (February 8, 2004): http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-243556A1.pdf.

[19] Internet Policy Statement of 2005.

[20] Ibid.

[21] See: "open, a." and "open, v.," *OED*, 3rd ed. (2004), Oxford University Press.

[22] See: "Why an Open Internet," Blog post, *Open Internet Coalition*: http://openinternetcoalition.org/index.cfm?objectid=8C7857B0-5C6A-11DF-9E27000C296BA163.

[23] Notice of Proposed Rulemaking, *In the Matter of Preserving the Open Internet* ("Open Internet NPRM"), 24 FCC Rcd. 13064 (2009), http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-09-93A1.pdf.

[24] "Barack Obama On Net Neutrality," Video, TheRophish, November 14, 2007, *YouTube,* April 25, 2014, https://www.youtube.com/watch?v=-j8lP9suvP8.

[25] Open Internet NPRM.

[26] See, e.g.: Andrew Moylan, "Spare us the broadband plan," Editorial, *The Washington Times*, March 31, 2010: http://www.washingtontimes.com/news/2010/mar/31/spare-us-the-broadband-plan/; Neil Stevens, "Danger at the FCC: An Omnibus Warning," Blog post, *RedState*, March 27, 2010: http://www.redstate.com/neil_stevens/2010/03/27/danger-at-the-fcc-an-omnibus-warning/.

[27] E.g.: Sloetjes, Door Janneke. "NEDERLAND IS NETNEUTRAAL!" Weblog post. *Bits of Freedom*. 8 May 2012. Web. 03 July 2014. https://www.bof.nl/2012/05/08/nederland-is-netneutraal/; Rueters. "Japan Sets up Panel to Study Net Neutrality." *MSNBC*. 15 Nov. 2006. Web. 03 July 2014. http://www.msnbc.msn.com/id/15727226/ns/technology_and_science-tech_and_gadgets/t/japan-sets-panel-study-net-neutrality/#.T-SmYCseCDg;
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[29] See examples from: "Beck through the looking glass: smears net neutrality as a Marxist plot to take over the Internet," Blog post, Media Matters for America, October 21, 2009: http://mediamatters.org/research/200910210026. Other examples come up in Chapter 4.

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[31] See, e.g.: John Czwartacki, "Preserving the Open Internet," Blog post, *Verizon PolicyBlog*, September 22, 2009: http://policyblog.verizon.com/BlogPost/668/PreservingtheOpenInternet.aspx; Lowell McAdam, "Finding Common Ground on an Open Internet," Blog post, *Verizon PolicyBlog*, October 21, 2009: http://policyblog.verizon.com/BlogPost/675/FindingCommonGroundonanOpenInternet.aspx; Alan Davidson and Thomas J. Tauke, "Google and Verizon Joint Submission on the Open Internet," *In the Matter of Preserving the Open Internet*, FCC GN Docket 09-191 (January 14, 2010): http://fjallfoss.fcc.gov/ecfs/document/view?id=7020378826.

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[33] Weisman, Jonathan. "Antipiracy Bills Delayed After an Online Firestorm." *The New York Times*. 20 Jan. 2012. Web. 03 July 2014. http://www.nytimes.com/2012/01/21/technology/senate-postpones-piracy-vote.html; Walsh, Jason. "Europe's Internet Revolt: Protesters See Threats in Antipiracy Treaty." *The Christian Science Monitor*. 11 Feb. 2012. Web. 03 July 2014. http://www.csmonitor.com/World/Europe/2012/0211/Europe-s-Internet-revolt-protesters-see-threats-in-antipiracy-treaty.

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[35] *Declaration of Internet Freedom*. Free Press. 2012. Web. 03 July 2014. <http://www.internetdeclaration.org/>.

[36] *Declaration of Internet Freedom*. TechFreedom. 2012. Web. 03 July 2014. <http://declarationofinternetfreedom.org/>.

[37] "The Promotion, Protection, and Enjoyment of Human Rights on the Internet," Resolution, United Nations, Human Rights Council, 29 June 2012, http://www.regeringen.se/content/1/c6/19/64/51/6999c512.pdf.

[38] See: "neutrality, n." *OED*, 3rd ed. (2003).

[39] See: "open, n. and v." *OED*, 3rd ed. (2003).

[40] I am grateful to Tom Streeter for raising these points in our conversations about net neutrality discourse and political messaging strategy.

Chapter 3

Terms of Power in Net Neutrality Policy

The previous chapter dealt with the broad-based emergence of the term 'net neutrality' out of a variety of interests and venues. This chapter examines the ways in which the application of specific policy-related terminology intersecting with 'net neutrality' discourse— particularly *information* and *telecommunications*— worked to shape the legal structures that enabled and constrained the emergence of internet infrastructures. I argue that particular emergent media keywords such as these carry power in the policy sphere such that the ways in which these terms of power get applied within regulatory discourse have great consequences for how media systems like internet infrastructures take shape.

While emergent media keywords play an important role in debates with far-reaching consequences, in the context of media regulation they are not necessarily socially prominent in the way that Williams discusses them. They typically carry more power within the policy sphere, where their arcane specialist definitions conflict with other meanings but ultimately tend to hold more sway. However, it is because these debates over the minutia of media regulation are too often obscured from public view that shedding light on them is all the more important. Indeed, Hugh Slotten (2000) shows how historically battles for control of media have played out through seemingly trivial technical and administrative decisions and Balkin (2008b) argues that this is only becoming more prevalent as political issues get debated as matters of technical design and standardization. Further, the terminology that gets used in these decisions often serves to foreclose debate. The specialized language in legal and technical discourse depends a great deal

on ‘terms of art’ with field-specific meanings that get used as unambiguous and efficient shorthand. In addition to limiting access to this discourse to elites who can decode the jargon in the intended way, taking terms of art as given also serves to foreclose debate about their meaning and the things they get applied to. Following Gillespie (2006), we can see how digging into the usage of specific specialist language, then, can serve to pry open preemptively settled discursive struggles.

This chapter is particularly concerned with how, in media policy discourse, these terms of power set the terms for power. In particular, it focuses on the acts of defining and classifying media technologies and the consequences that have followed from this in the context of net neutrality policy. A major part of Foucault’s classic discourse analyses (1981, 1982, 2002) theorizes how classifying phenomena is an exercise of great power and I assert that this power is further exacerbated when those classifications are established in formal legal rules: for emergent media, defining a technology establishes the range of possible actions with it and delimits the options of what they can be made to do, especially at the level of embedded infrastructures.

In this chapter, I investigate the struggle over the structure of broadband networks as it played out in the use of the terms ‘information’ and ‘telecommunications’ in FCC proceedings. The application of these two policy keywords comes with particular power to structure the technologies they are used to describe. The FCC holds the discursive power over emergent media to name, make knowable, and, therefore, controllable— power that is backed by the disciplinary power to enforce this definition. Its classification of a medium works to determine how much public oversight may be applied through which appropriate structures— namely, closed private control or open public control. Through discursive, political economic, and legal analysis of legislative, regulatory, and judicial documents including texts key to the history and

prehistory of net neutrality policy, this chapter examines the power that comes with naming technologies along lines of *information* or *telecommunications*.

The first section explores how 'information' and 'telecommunications' were defined and deployed as discursive formations by the FCC, drawing from the Commission's precedent-setting Computer Inquiries from the 1960s to the 1980s and the Telecommunications Act of 1996. It builds on this to show how the net neutrality fight was kicked off in earnest with the definition of broadband internet access as an 'information service' in the FCC's Cable Modem Order of 2002 and the *Brand X* Supreme Court decision in 2005. The second section will consider the act of classification and the discursive power it confers in regulation with an analysis of the 2008 *Comcast v. FCC* appeals court decision that brought into relief the implications of the FCC's choice to classify broadband as a technology for accessing others' information, not carrying everyone's communications. The third section delves into the regulatory traditions underlying the definitions and classifications based in the terms of 'information' and 'telecommunications.' It particularly focuses on the common carriage tradition and its relation to an affirmative conception of First Amendment free speech rights. This is ground that has been covered by other scholars, but my analysis of these regulatory definitions is unique in several ways.

To begin with, much of the academic work on the FCC's internet access classifications, as with much of the academic work on net neutrality in general, comes from law journals and as such is strictly legalistic in approach (e.g., Cannon 2003; Crawford 2009; Comstock and Butler 2000; Oxman 2009; Frieden 2004, 2011, 2012; Selwyn and Golding 2011; Mulligan 2010; Roxberg 2012; Reicher 2011).[1] Such work is useful in establishing basic empirical facts, legal interpretations, and policy recommendations, but does not have as much to offer in terms of

deeper critical analysis of the policy discourse at hand. The intervention of this legal scholarship, that is, is toward the policy about which they are writing, not larger theories about how policy works. Indeed, throughout this dissertation I take the legal scholarship on net neutrality and its regulatory context more as primary sources in my research than secondary sources, for the ways in which they contribute to and shape the discourse in the policy sphere more than they develop interpretive theories of how that discourse operates (see the discussion of academic discourse in Chapter 2). I see a certain amount of my role as a critical analyst as translating the lawyer-speak and interpreting its meaning in a different field. Much of the legal scholarship referenced in this dissertation, then, is drawn on more for documentary evidence than for theoretical development (although exceptions include theoretical perspective drawn from law scholars such as Wu, Crawford, and Nunziato).

The most relevant work on net neutrality, FCC terminology, and its role in policy change from within communication and media studies comes from Lentz, whose perspective is similar to the one I develop here. Indeed, her recent work covers many of the same contested FCC definitions considered in this chapter (2013) and sees such regulatory discursive struggles as consequential for shaping media structures and practices (2011). While we share much, my analysis differs through at least two unique contributions. First, while Lentz operates within the more strictly structuralist theoretical framework of "critical discourse analysis" (CDA) and asserts a view of regulatory definitions as "nodal points" in an intertextual process (2011, 2013), my discursive analysis comes from a more culturalist Foucauldian approach and sees such definitions as "keywords" for regulatory discourse related to media emergence. Second, as her work seeks to "excavate historicity" in the net neutrality debate, Lentz's focus is on what I see as the prehistory of net neutrality and not 'net neutrality' discourse proper— looking more at the

FCC's Computer Inquiries of the 1960s-1980s than the FCC's broadband proceedings of the 2000s and their judicial challenges which I am concerned with. This also separates my work from histories that seek to trace the roots of net neutrality as a concept, back to the end-to-end arguments and common carriage tradition, as well as the Computer Inquiries (Holt 2011; Schaeffer 2013; Lentz 2011, 2013).

I build on this work in arguing that the way that media technologies are defined in regulatory policy is an exercise of great discursive power and take it further to focus on the important material and political consequences that follow from it, with implications for industrial, technical, and democratic structures. I make this argument through original discursive analysis of the operative definitions of broadband in communications policy that underlies net neutrality regulation. The legal context is the focus in this particular chapter— specifically, how the FCC's terminology underlying broadband policy put in jeopardy the judicial defensibility of the Open Internet rules— but the terminology discussed in this chapter comes up in further contexts throughout the remainder of the dissertation. This chapter's analysis of regulatory terminology sets up later chapters' considerations of how that policy discourse shapes subsequent popular and advocacy discourse (Chapter 4) and legal frameworks (Chapter 5), as well as industrial arrangements and technical infrastructures (Chapter 6).

'Information' and 'telecommunications'

Does internet access offer you information? Or does internet access offer you telecommunications? The answer to both of these questions is, of course, yes. When was the last time you got on the internet and did not both read or watch something online and send and receive messages of some kind? Clearly, the internet is a resource for both information and

telecommunications, based on nearly any possible understanding of those two terms. How to draw a line between these two services and which of these labels gets applied to internet access services is not a merely semantic exercise, though— it is an act of great political power with serious consequences. Under the US communications policy regime, regulators must put internet access in one of these categories or the other— either information or telecommunications. Facing this regulatory quandary as new broadband networks emerged to be the primary means to access the internet in the US around the turn of the millennium, the FCC chose to classify broadband internet access services as "information services."

This decision could easily be seen as a minor administrative formality, but it has had tremendous consequences for the structure of the internet and the possibilities it can offer. The definition of broadband as "information" instituted limitations on internet usage in three particular ways. First, it shaped the network infrastructure upon which the internet depends during a critical juncture in its development and therefore enabled important enclosures of otherwise open technologies. Second, it constrained end-users' free speech rights and rolled back the public interest obligations of network operators by regulating them more like publishers and less like common carriers. And third, it jeopardized the ability of the FCC to enforce net neutrality obligations. These dynamics will be discussed in greater detail later in this dissertation, but we will focus in this chapter on these terms' work in shaping the legal structures of broadband networks. I will begin by looking at the definitions in question and how they have been employed in relation to internet access.

The definitions of "information" and "telecommunications" services originate in the Communications Act of 1934, as amended by the Telecommunications Act of 1996 ("the Act").[2] The Act created the FCC and remains the basic legislation that the FCC is tasked with

implementing, for the purpose of "regulating all interstate and foreign communication by wire or radio so as to make available, so far as possible, to all people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex, a rapid, efficient, Nationwide, and world-wide wire and radio communication service, with adequate facilities at reasonable charges."[3] Beyond this general authorization to regulate communication services, the Act delegates to the FCC different regulatory authority over different types of services. To serve this purpose, the Act is broken up into several Titles that cover particular types of communications services and into which the FCC is responsible for classifying specific media. The two relevant classifications for internet access are "telecommunications services," covered under Title II of the Act, and "information services," covered under Title I.

"Telecommunications" services as defined in the 1934 Act carry users' messages from one end of a network to the other without interference— essentially, providing pure transmissions over neutral conduits. "Telecommunication service" is defined as an "offering of telecommunications for a fee directly to the public… regardless of the facilities used."[4] "Telecommunications" is then defined as "the transmissions, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received.[5]" Title II of the Act spells out specific regulatory obligations for the FCC to enforce on telecommunications services as "common carriers." The common carriage tradition that Title II applies to telecommunications services considers essential networks of two-way communications as public utilities that should be offered to all on an open, universal, and nondiscriminatory basis. The archetypical example of a Title II telecommunications service is telephone service. Thus, "telecommunications services" are fundamentally linked to the principle of common carriage.

"Information" services, on the other hand, use telecommunications services to distribute various kinds of data to users— essentially, providing content over a network. "Information service" is defined in the Act as an "offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications…"[6] Information services are not given their own section in the Act, but are covered under Title I, which extends to the FCC authority over activities that are "reasonably ancillary" to the effective performance of the Commission's various responsibilities.[7] Therefore, the Act gives the FCC only very limited authority over information services, which are considered publishers of content with First Amendment rights to publicize only what they choose, with editorial control to reject content they do not wish to provide, and free from any dictates of government-compelled speech. The quintessential publishers that the FCC cannot regulate are newspapers, broadcasters, and cable television channels.

The way these definitions have been employed in US communications regulation has had a great impact on the infrastructures of digital networking since its inception. Contrary to the popular image of the internet as unregulated or even 'unregulable' (see examples of cyberlibertarian discourse discussed in: Lessig 1999; Goldsmith and Wu 2006; Mueller 2010), the US government has regulated the computer networks that would grow together into the internet since they were first developed in the 1960s— regulation that encouraged, rather than stifled, the growth and innovation of digital networked technologies and their subsequent connection into the network of networks we know today (Abbate 1999; Streeter 2010). Indeed, a series of FCC reports and orders from 1966 to 1986 known as the Computer Inquiries played a pivotal role in shaping the open structure of the internet (Cannon 2003). The primary concern of the Computer Inquiries was to design a new regulatory framework for communications networks that would

protect the promising innovation evident in computer networking by the late 1960s from the stifling incumbent telecom monopoly power of AT&T.

The key influence of the Computer Inquiries was mandating open access to the network infrastructures on top of which the internet was built (Cannon 2003; Lentz 2011). The Computer Inquiries worked in concert with the similar open access mandates of the FCC's 1968 Carterfone decision and the Modified Final Judgment in the AT&T breakup (Wu 2007).[8] This was achieved by separating carriage from content on the network through a distinction between "basic" and "enhanced" services— the exact distinction upon which the Act's definitions of "telecommunications" and "information" are respectively based. The Second Computer Inquiry ("Computer II") introduced this differentiation between "basic services" and "enhanced services," with a built-in guarantee that the latter may use the services of the former for whatever purposes they choose.[9] Computer II defined "basic services" as an "offering of pure transmission capability over a communications path that is virtually transparent in terms of its interaction with customer supplied information."[10] It defined "enhanced services" as "offered over common carrier transmission services used in interstate communications, which employ computer processing applications that act on the format, content, code, protocol, or similar aspects of the subscriber's transmitted information; provide the subscriber additional, different, or restructured information; or involve subscriber interaction with stored information."[11] The definitions of "telecommunications" and "information" services that Congress used in drafting the 1996 Act were based on the Second Computer Inquiry's definitions of "basic" and "enhanced" services, respectively (Comstock and Butler 2000: 10-12; Oxman 2009). In the Computer Inquiries, the FCC defined the Bell monopoly telephone network as a "basic service" that could be used as a common carriage resource for any "enhanced service." Free from gatekeeper control by

entrenched network operators, enhanced services subsequently took root in this open structure and germinated into today's great diversity of online services and applications (Cannon 2003).

Congress helped spur the first generation of publicly available internet access services by extending the differentiation between carriage and content to the 1996 Act's definitions of "telecommunications" and "information" services (Comstock and Butler 2000). Dialup modem technology— the original form of internet access— was only able to be developed because open access to telecommunications lines was guaranteed. The first generation of internet service providers (ISPs) were able to provide dialup internet access over local telephone networks because these facilities were designated "telecommunications services" over which internet providers could offer their "information services." A new and highly competitive market of nearly 10,000 independent ISPs sprang up across the US in the 1990s, because these regulations enabled them to lease wholesale access to physical telecommunications infrastructures and sell retail access to the internet— opening up for 'non-facilities-based' ISPs what would have otherwise been a natural monopoly for 'facilities-based' network operators (Noam 2009: 275–78).

The key turning point for these definitions and their implications for the structure of the internet came with the development of broadband internet access services in the late 1990s (Comstock and Butler 2000). With faster speeds, higher bandwidth, and always-on real-time connections, these broadband services— including phone companies' direct subscriber line (DSL) services, but dominated by technically superior cable modem services— became the primary means of internet access by the early 2000s. Cable broadband especially represents a significant departure from the prior model of internet access: whereas with narrowband internet access facilities-based ISPs were rare, cable modem service is provided exclusively by cable network

operators themselves. Essentially, cable operators combine telecommunications services from their own network infrastructures with information services to connect users to the internet.

This vertical integration of telecommunications and information services within cable modem service is not a technologically necessary arrangement, nor inevitable in any way— it was set up this way because cable networks are not labeled "telecommunications services" in the US policy sphere (Selwynn and Golding 2011). Cable networks traditionally provided consumers with one-way access to video programming pre-selected by the network operator, which, as we saw in the *Midwest Video II* case, the Supreme Court found ought to allow them to control network content and avoid common carriage regulation.[12] By escaping this common carriage oversight, cable operators were able to leverage their ownership of network infrastructures into control over both content and carriage. Without the open access mandates that come with a "telecommunications" classification, cable operators are allowed to be the sole providers of information services— including internet access— over the cable networks they operate and have obvious economic incentives to keep that market to themselves (Comstock and Butler 2000). Despite the fact that the internet access service these cable operators provide necessarily involves carrying two-way traffic from users to other users— the hallmark of telecommunications which requires common carriage protection— the "information service" classification stands. This collapse of the distinction between carriage and content allows broadband network operators the same control over end-users' communications as any other information on the network.

All it took for cable operators to avoid common carriage regulations and keep close control of the uses of cable networks was for them to call their internet access services "information services." Internet access service has always involved both telecommunications and information components— the only difference is that with dialup, access to carriage and access to content

were typically provided by two separate entities, but with broadband they are typically both provided by the same company. Indeed, information services include a telecommunications component by definition, literally: the 1996 Act's definition of "information service" is an "offering of a capability[…] *via telecommunications*[…]" (emphasis added).[13] Further, the FCC has found that this telecommunications piece does not somehow disappear once it is used by an information service and can be considered separate.[14] However, cable broadband operators maintain that they offer a single integrated service: they promise that the telecommunications and information service components of their broadband service are "inextricably linked."[15] Network operators called this whole package of broadband access an "information service," making it virtually untouchable by regulators. After all, cable companies argued, internet access has been regulated as an "information service" since the dialup days.

However, dialup was so lightly regulated because it was provided separately by independent ISPs and the underlying telecommunications component was protected by common carriage. Indeed, in what is known as the "Stevens Report"—where the FCC initially classified dialup internet access as an "information service"— we can see how the Commission clearly based this light-touch regulation on the presumption that internet access services would be offered by independent ISPs and, although less emphatic on this point, ultimately found facilities-based internet access providers too different from dialup ISPs to be similarly classified as "information services." As the Stevens Report put it: "Internet access providers, typically, own no telecommunications facilities. Rather, in order to provide those components of Internet access services that involve information transport, they lease lines, and otherwise acquire telecommunications, from telecommunications providers[…]"[16] Further, the Report acknowledged the underlying telecommunications component of facilities-based ISPs' internet

access services, in saying that it needed to "reexamine" how such services were classified: "One could argue that in such a case the Internet service provider is furnishing raw transmission capacity to itself[…] This is not inconsistent with our conclusion[…] [I]n every case, some entity must provide telecommunications to the information service provider. When the information service provider owns the underlying facilities, it appears that it should itself be treated as providing the underlying telecommunications."[17]

But in 2002, the FCC and the Supreme Court, working within exactly the terms set by the cable companies, found to the contrary that broadband internet access is solely a nearly unregulated "information service." In a reversal of prior internet access policy, the FCC's Cable Modem Order of 2002 classified cable broadband as an "information service" because it found no "separable offering" of telecommunications service directly to the public.[18] This not only contradicted previous distinctions, but overturned the Ninth Circuit Court of Appeals' 2000 ruling in cable broadband's first substantial policy consideration, which separated out the pipeline from the services provided over it and found that the operation of broadband lines should be subject to common carriage obligations.[19] After its cable broadband classification passed muster at the Supreme Court in *Brand X*, the FCC reclassified DSL to follow cable as a solely "information service" in 2005.[20]

All this is to say that cable operators do not voluntarily offer users common carriage, and the FCC will not force them to— cable presided over a union of telecommunications and information and what the broadband gods have joined, apparently, no regulator can separate. I assert that this finding is also a bit tautological: the FCC says that with cable broadband there is no "separate telecommunications offering" to regulate, but there is no "separate telecommunications offering" because they have not regulated to separate it. Put another way, if

cable operators do not provide users pure transmissions without interference, then they can avoid regulations requiring them to provide pure transmissions without interference. The FCC operated within the cable companies' terms, but it also showed its hand in acknowledging its own ideological devotion to deregulation *tout court*: the Cable Modem Order states that it expressly sought to remove rules on internet access because of its belief that "broadband service should exist in a minimal regulatory environment" that it assumed would "[promote] investment and innovation in a competitive environment."[21]

In its 2005 *Brand X* decision, the Supreme Court upheld the FCC's classification. The Court ruled that whether broadband should be defined as entirely an information service, or as having a separable telecommunications service within it, remained "ambiguous" and therefore the Court must defer to the judgment of the FCC, as the "expert agency" on such communications policy, so long as the Commission's finding was "reasonable."[22] This deference to "expert agencies" was based on the precedent known as *Chevron* doctrine, which holds that "ambiguities in statutes within an agency's jurisdiction to administer are delegations of authority to the agency to fill the statutory gap in a reasonable fashion."[23] Under *Chevron* doctrine, if a court rules that the law in question is "ambiguous" and the relevant agency was "reasonable" in implementing regulations based on it, that court must accept the ruling made by the agency, regardless of if it agrees with the interpretation or not.

In particular, the case turned on the ambiguity of the word "offer:" it was unclear to the Court whether, in "offering" users a combined telecommunications and information service, broadband providers "offer" them both telecommunications and information. It seems clear on its face that if telecommunications is a part of a combined "offering" it is, indeed, being "offered"—but the Court ruled that the FCC's interpretation was "reasonable" because the

telecommunications service is "offered" only as an integrated package, it does not exist on a "stand-alone basis" and therefore cannot itself be regulated.[24] The surprisingly principled dissent from Justice Antonin Scalia laid bare the silliness of denying the telecommunications component of broadband service through a marvel of analogical reasoning that is worth recounting here, if for nothing else than some amusement:

> There are instances in which it is ridiculous to deny that one part of a joint offering is being offered merely because it is not offered on a 'stand-alone basis.' If, for example, I call up a pizzeria and ask whether they offer delivery, both common sense and common 'usage' would prevent them from answering: 'No, we do not offer delivery— but if you order a pizza from us, we'll bake it for you and bring it to your house.' The logical response to this would be something on the order of, 'so you *do* offer delivery.' But our pizza-man may continue to deny the obvious and explain, paraphrasing the FCC and the Court: 'No, even though we bring the pizza to your house, we are not actually 'offering' you delivery, because the delivery that we offer our end-users is "part and parcel" of our pizzeria-pizza-at-home service and is "integral to its other capabilities."' Any reasonable customer would conclude at that point that his interlocutor was either crazy or following some too-clever-by-half legal advice.[25]

The *Brand X* decision sealed the complete subsumption of telecommunications into information within broadband, on exactly the cable companies' terms. It is really a pretty simple move: combine carriage and content on their networks, say 'pay no attention to the telecommunications service behind the curtain,' and then use the magic words "information service." By refusing to acknowledge the existence of telecommunications as a service category and calling everything "information," these broadband providers, as Ammori, Crawford, and Wu put it, "effectively deregulated themselves."[26] The logical end of this is that there is now almost complete denial of the existence of something that might be called "telecommunications services" altogether. Next-generation broadband providers have followed the steps laid out by cable and DSL broadband services, so mobile broadband networks are also now defined as "information services" and fiber-to-the-home broadband networks have thus far avoided any telecommunications service regulation.[27] Indeed, the decreasingly used copper-wire public

switched telephone network (PTSN) is now virtually the only "telecommunications service" left, but it is in the process of being retired by telephone companies in favor of an all-IP voice network that can then, of course, be regulated as an "information service" (Frieden 2013).[28]

The disappearance of telecommunications leaves not only the nonsensical situation of everything being content with apparently nothing carrying it, but also the complete lack of any infrastructure that can be counted on as a universal communications utility. If network operators get to define themselves under the classifications, of course they will choose to forego the public interest obligations. And by following this definition, the FCC forfeited its authority over any user protections or competition safeguards— leaving no say for the nation's supposed communications watchdogs over access to its most essential communications network.

Classification and the legal framework for net neutrality

In addition to influencing the shape of internet infrastructure, the definition of broadband as an information service was what was ultimately responsible for sinking the FCC's enforcement of net neutrality policy itself: the heart of the Open Internet rules was torn out by the DC Circuit Court of Appeals in early 2014 in a ruling in the *Verizon v. FCC* case that turned on the FCC's classificatory terminology. The classification of broadband as an "information service" covered under Title I of the Communications Act left the FCC's Open Internet protections on shaky and severely circumscribed legal ground. With very little statutory authority over services classified under Title I, the FCC is not able to regulate information services directly, only in ways "reasonably ancillary" to its oversight of other services, and the agency cannot legally require information services to be common carriers. This case was preceded by another landmark case decided by the DC Circuit— *Comcast v. FCC* in 2010— that struck down the FCC's previous

attempts to enforce net neutrality on broadband providers on similar grounds. In light of the court's confirmation of the FCC's limited legal ability to implement Open Internet rules if broadband is defined as an information service, a fervent push for— and a fiery pushback against— reclassification of broadband under Title II came to the fore of the net neutrality battle. I find in the analysis that follows that the fight over definitions has come to define the fight over net neutrality. In this section we will explore how the implications of these definitions truly came to a head in the *Comcast* case.

Robb Topolski was spending a lot of time at home in bed while recovering from a long-term illness in early 2007. A software engineer and fan of vintage barbershop quartet music, Topolski passed the time trading barbershop recordings on peer-to-peer (p2p) filesharing networks. These p2p networks like BitTorrent, by enabling the circulation of hard-to-find, out-of-copyright songs with no mainstream distribution, are crucial to the active fandom practices of Topolski and others like him. That is, until one day he noticed that his uploads to BitTorrent had stopped working. What Topolski did next would expose previously hidden exercises of control over internet users and put him at the center of the case for enforcing net neutrality. Topolski, although a Right-leaning libertarian and despite the health problems he was fighting through, was an unlikely crusader for FCC intervention, but soon he would be on the front lines of the net neutrality fight.[29]

Topolski ran some tests with a packet sniffer and discovered that Comcast, his broadband provider, was interfering with his connection to BitTorrent and other filesharing services. He posted the results of the tests he had run to a discussion board on Broadband Reports, where he explained that Comcast was injecting fake packets and causing the p2p connection to fail.[30] The post drew the attention of a reporter from the Associated Press (AP) and the digital rights

advocacy group the Electronic Frontier Foundation (EFF). Each ran its own tests and confirmed Topolski's findings: regardless of whether the files were copyrighted or not, regardless of whether the network was congested or not, Comcast was blocking the use of BitTorrent and other p2p services.[31] This was consistent with the many other users who were having similar problems with Comcast.[32]

The AP story, published in October 2007, was a bombshell.[33] The article called Comcast's blocking practices "the most drastic example yet of data discrimination by a US Internet service provider" and explicitly framed them as violations of net neutrality.[34] It highlighted the difference between the well-established expectation that all internet traffic be treated equally and the very real examples of interference with users' online activities, which shed a prominent light on the issue for a mainstream audience. Somewhat presciently, though, it pointed out that net neutrality "is not enshrined in law"— which we will see below became perhaps the bigger issue.[35] Comcast, for its part, quickly issued a blanket denial, disclaiming any responsibility for its users' problems with p2p filesharing.[36] That is, until the evidence mounted up— then Comcast owned up to 'managing' p2p traffic over certain levels of local congestion.[37] That is, until further extensive testing by Topolski and others contradicted those claims— then Comcast changed its story again and admitted that its p2p management occurred regardless of network congestion.[38] At that point it became clear that Comcast blocking p2p filesharing had less to do with managing its network and more to do with protecting its core cable television business from the disruptive threat of online video distribution.

The widely reported Comcast blocking revelations shook up internet users and ignited protests and condemnations from media advocacy groups and scholars. Net neutrality advocates thought they had avoided disaster after AT&T's and Verizon's publicly discussed plans around

2005-2006 for new tolls and fast lanes online never materialized (discussed further in Chapter 6), but only a few years later they found that the "nightmare scenario" was already there. Marvin Ammori, legal scholar and at the time general counsel for Free Press, put it: "Then suddenly, out of nowhere, Comcast is doing exactly what we most feared[…] secretly degrading an application[…] We didn't expect the first violation to be so blatant."[39] More than prioritizing some traffic or imposing new charges, Comcast was surreptitiously blocking the use of certain services on its network.

The way Comcast was undertaking its blocking made it even more egregious. According to extensive technical testing done by the EFF, Comcast was stopping the transmission of p2p uploads, or severely degrading them to the point of effectively blocking them, by forging 'reset packets' that suspend the connection between host and client computers.[40] In describing how Comcast was using against its own customers the same "techniques used by malicious hackers," the EFF explained that Comcast's traffic blocking via packet forgery was the equivalent of "a telephone operator that interrupts a phone conversation, impersonating the voice of each party to tell the other that 'this call is over, I'm hanging up.'"[41] On top of its blatant blocking, then, Comcast's deception was problematic because it disguised its interference as an issue on the users' end, leaving no way to address it with the operator. As we will discuss further in Chapter 6, Comcast's blocking of p2p filesharing is a very clear example of network operators' attempts to assert control of the uses of their network under the guise of dealing with 'data hogs'— a disciplining of the user-led circulation of content with troubling consequences not just for its own customers but the circulation of traffic across the internet and the emergence of new cultural practices. More than any other single moment in the debate, the exposure of Comcast's p2p traffic blocking galvanized strong support for the legal enforcement of net neutrality.

Based on this evidence of Comcast's secret blocking of p2p traffic, the media reform advocacy groups Free Press and Public Knowledge filed a formal complaint with the FCC in November 2007.[42] The groups' case was based on the FCC's Internet Policy Statement (IPS), the net neutrality guidelines adopted by the Commission in 2005.[43] The net neutrality advocates claimed that Comcast was denying its customers the use of the content, applications, and services of their choice, a violation of those principles. Comcast challenged that with the argument that it was not technically blocking traffic, merely delaying it, and that its techniques were "reasonable network management" allowed under the IPS.[44] As was discussed in Chapter 2, the IPS was released in the aftermath of the Supreme Court's 2005 *Brand X* decision upholding the FCC's 2002 decision to classify cable broadband as a Title I information service and the Commission's subsequent classification of DSL broadband also under Title I. Essentially, the nonbinding openness guidelines of the IPS were adopted as a sop to net neutrality advocates concerned by the removal of actual nondiscrimination protections that went away with the Title I classification decisions. This meant that the ability of the FCC to enforce those net neutrality principles was far from certain at that point— even though then-Chairman Kevin Martin insisted to Congress that the Commission had all the legal authority for broadband regulation that it needed under Title I and actively resisted the passage of net neutrality legislation.[45]

The FCC then opened an investigation into Comcast's blocking activities. Over 20,000 complaints and around 6500 public comments came in.[46] The Commission convened two field hearings on the issue in early 2008, that included panels of technical and legal specialists, from industry and academia, along with testimony from members of the public, including Topolski. The first hearing, held at Harvard Law School, was accompanied by public demonstrations outside and a packed house inside. For all the fervor amongst those in attendance, spilling out into

overflow rooms, there was something curious about many in the main hall: Comcast had paid seat-fillers to prevent others from getting in, denying them the opportunity to testify, and many of them just slept through the hearing.[47] Attendees who were awake were able to hear Comcast executive David Cohen double down on the company line: "I'm going to say again, on the record in front of this Commission, Comcast does not block any Web site, application, or Web protocol, including peer to peer services. Period. Doesn't happen."[48] Cohen's statements described Comcast's activities as a "limited form of network management" in response to "excessive" bandwidth consumption.[49] His explanation of the situation maintained Comcast's stance at that point that it was a targeted response to congestion at particular times and in particular places, which shortly afterwards was proven to be untrue.[50] Regardless, as Wu put it during the hearing, "There is a single fact here that [Comcast] cannot deny[…] users of the Internet sought to use an application a certain way, and they were blocked[…] Now [Cohen is] saying that they weren't using the Internet in the 'right way.' They weren't using these applications in the 'right way.' Well, the whole problem is that Comcast shouldn't be telling people how they're supposed to use applications."[51] Comcast, which at that point had only recently shifted the focus of its business from cable television to primarily featuring broadband provision, was a company used to total control over the content it chose to transmit, and it was beginning to run into trouble for attempting to exert that power over the use of the internet.

At the close of its investigation, the FCC released an order ("Comcast Order") in 2008 ruling that Comcast's blocking of BitTorrent and other p2p filesharing applications violated the guidelines of the IPS and that along the way the company lied about its actions, schemed to prevent agency oversight, confused users, and threatened innovation and the flow of communication throughout the internet.[52] Far from 'reasonable network management,' the

Commission found that Comcast's practices were invasive, outright discriminatory, and based in a conflict of interest with its own competing video-on-demand service.[53] Indeed, the fact that there are much more effective and much less discriminatory forms of managing a network to actually alleviate the congestion issues that Comcast claimed was its goal in employing its methods suggests that Comcast's motives were not actually as it stated.[54] The Comcast Order was rather unique as FCC orders go in addressing the public: in acknowledgment of the growth of net neutrality as a cause that had captured wider citizen concern than most agency proceedings and the implications of its actions for ordinary users, the Comcast Order drew explicitly from evidence provided by individual internet users and actually called on the public to remain engaged with the issue and be vigilant in watching out for broadband providers' abuses.

The Comcast Order was taken as a major victory by the media advocacy community that initiated it. Gigi Sohn, the founder of Public Knowledge, called it the first "proactive victory" for the public interest in communications that she could recall in her twenty-year career. She referred to the passage of the 1992 Cable Act, the *Reno v. ACLU* 1997 Supreme Court decision overturning the Communications Decency Act, the circuit court reversal of FCC media ownership deregulation in 2003, and a federal court invalidating FCC broadcast flag rules in 2005 (one could also include the more recent example of stopping the SOPA/PIPA legislation in 2011-2012) as all "reactive" victories since, "They either stopped bad things from happening or made bad decisions a little less bad. While public interest groups [initiated…] effort[s] to create pro-consumer policies, almost all of them sat in the Commission's bowels for years. That the Comcast complaint was[…] decided [rapidly…] is nothing short of a miracle in the annals of public interest communications advocacy."[55] Sohn went on: "So hopefully you'll pardon me if I savor this victory a bit. It's been a long 20 years, and nobody knows whether this is the start of a trend

or an aberration… Playing offense is a lot more fun than playing defense and industry and policymakers should expect more of the former in the near future."[56] These groups did, indeed, go on offense as the most persistent force for strong open internet regulation from that point on, but the momentary elation of this first big win in the net neutrality fight was made all the more ironic, because rather than being gained-ground from which the front would be advanced, the Comcast Order turned out to be the basis for the devastating loss to come when the rotten foundation it was built upon was revealed.

The decision against Comcast was an anomaly for the typically pro-industry FCC, especially amidst the wave of deregulation during the 2000s at the agency — which raises the question, why did the FCC go out of its way to censure Comcast? The Chairman during the investigation was Kevin Martin, an appointee of George W. Bush who was far from a consumer advocate, making him unlikely to spearhead the investigation against Comcast as he did. While Martin reliably protected the interests of the telecom industry, though, he was known almost as much for a reputation for taking on cable companies.[57] From this perspective, going after Comcast can be understood less as looking out for users and more as going after the cable company to the competitive advantage of the phone companies. The FCC investigation drummed up a great deal of negative publicity for Comcast just as it was rising over AT&T to the top of the broadband provider heap and AT&T was pushing hard to break into the multichannel television market.[58]

For as harsh as the text of the Comcast Order was on the company, the practical result was nothing more than a very public scolding for its bad behavior. Indeed, rather than serve as a useful precedent for the enforcement of openness regulations, the long-term legacy of the FCC's investigation of Comcast's blocking can actually be seen as complicit in the enclosure of the

internet that would take shape in the years that followed. While the FCC did not fine Comcast for its violations, it did order the company to stop its blocking and publicly explain its practices. By that point, however, Comcast had already voluntarily changed its network management techniques. Before the Order came down, Comcast had announced it was abandoning any form of traffic differentiation based on application or service and would be moving to 'protocol agnostic' forms of network management.[59] What this meant was that, since addressing network congestion by blocking or degrading particular flows of traffic was met with pushback by users and the FCC, Comcast would just restrict all traffic equally: Comcast became the first major wired broadband provider to introduce caps on the amount of data its customers could use in a month. In initiating these 'data caps' as a more transparent replacement for more aggressive discriminatory traffic interference, Comcast was able to make the unpopular move more palatable to users and these restrictions became by the time of this writing industry standard explicitly blessed by the FCC. Data caps and their implications for net neutrality will be discussed in further detail in Chapter 6, where we will see how this tradeoff caused problems for net neutrality down the road. It is important to note here, though, how the Comcast Order may have been a high water mark for the enforcement of net neutrality protections, but it also marked the beginning of the end for unlimited access to the open internet.

The Comcast Order also set in motion the first real test for the legal standing of net neutrality policy at the FCC— a test that the FCC would fail tremendously, leaving broadband regulation of all kinds in disarray. The year after its release, Comcast appealed the FCC's decision, leading to the *Comcast v. FCC* case heard by the DC Circuit Court of Appeals in 2009.[60] Its argument against the FCC was pretty direct: "For the FCC to conclude that an entity has acted in violation of federal law and to take enforcement action for such a violation, there

must have been 'law' to violate. Here, no such law existed."[61] Comcast's case boiled down to the fact that the FCC ruled that Comcast was in violation of the guidelines of the Internet Policy Statement, but rather than legally binding regulations, the Internet Policy Statement was just that— a statement, filled with guidelines but not enforceable rules. At oral argument, Helgi Walker, the attorney representing Comcast, told the court that the IPS was just "a piece of paper" that "quite simply lacks[ed] any legal force or effect."[62] This was the same argument forwarded by Republican FCC Commissioner Robert McDowell, one of the most prominent deregulatory voices in the policy sphere, in his dissent from adopting the Comcast Order, where he predicted this was sure to "doom this order on appeal."[63] Indeed, even the text of the IPS itself suggested it was merely a set of recommendations for broadband providers and was not legally enforceable on its own.[64] Further, the fact that at the time the *Comcast* case was in court at the DC Circuit the FCC was simultaneously working on the Open Internet proceeding to put binding net neutrality regulations on the books made it pretty clear that the Commission understood that the IPS was not itself binding regulations.

It was a slam-dunk case for Comcast. At oral arguments the three-judge panel that was to decide the case made clear just how much the decision was already a foregone conclusion. At one point chief judge David Tatel asked FCC lawyer Austin Schlick, "How would you prefer to lose?" before forcing him to take his choice of the most reasonable of the many strong arguments against the Commission.[65] After taking his whipping from the judges, Schlick was left to simply beg for a ruling that would leave the FCC some room to move forward with the pending Open Internet rules: "If I'm going to lose I would like to lose more narrowly[…] But above all, we want guidance from this Court so that when we do this rule-making[…] we know what we need to do to establish jurisdiction."[66] Implying just how much the decision was already wrapped up, and

just how bad it would be for the FCC, Tatel responded: "The impact of our decision will be perfectly clear."[67]

The impact certainly was clear— after the DC Circuit issued the *Comcast* decision in April 2010, the FCC's authority to regulate broadband was shown as nearly nonexistent.[68] The court flat-out rejected the FCC's argument that although it did not have direct statutory authority to regulate broadband internet access services, it did have "ancillary authority" over broadband. As discussed earlier in this chapter, the FCC's ability to regulate comes from authorization in the Communications Act and if the Commission is not given direct authority in the statute over a service it can only regulate it to the extent that it is "reasonably ancillary to the Commission's effective performance of its statutorily mandated responsibilities."[69] The DC Circuit ruled that the FCC could not regulate Comcast's network management practices because the Commission did not have direct authority to regulate broadband and did not present any specific delegation of authority to which it would be reasonably ancillary.[70] The sections of the Communications Act that the FCC pointed to for its statutory authority over broadband all came from Title I, which only grants the Commission's general jurisdiction over communication by wire and radio and, as discussed earlier in the chapter, only authorizes very limited regulation over information services. The Commission relied for its ancillary authority primarily on Section 230 from Title I of the Act, which sets out the broad policy goal to "promote the continued development of the Internet [and] to encourage the development of technologies which maximize user control."[71] The DC Circuit ruled that such vague "policy statements" are not enough to authorize the FCC's specific regulation of broadband, as that would leave the FCC's regulatory abilities unmoored and potentially endless.[72]

This was the moment that the seeds of the FCC's deregulation of internet access produced

their bitter fruit. The Commission's decisions discussed above classifying broadband as an information service starting in 2002, backed up by the Supreme Court's *Brand X* decision in 2005, left little ground under Title I on which the FCC could pass any kind of rules. In the *Comcast* case, then, it became crystal clear that, with that definition of broadband, the FCC had thrown away its ability to ensure openness and nondiscrimination on the internet. The immediate effect of this was that Comcast— the corporation that had just been proven to be abusing its bottleneck position as a last-mile network operator to exert strong-arm control over what users could do on the internet, the corporation that already dominated the cable television market and had just become the largest broadband provider in the country— would be left with unrestrained power. Indeed, at the point the DC Circuit decision was handed down in 2010, Comcast was awaiting the eventual approval for it to buy out NBC-Universal— combining the country's dominant cable and broadband operator with the most prestigious owner of film and television content— cementing its position as the single most powerful media corporation in world. (Crawford 2009). Beyond that, though, the FCC— the federal agency tasked with protecting the public interest in communications— had its ability to have any oversight over the most essential basic communications infrastructure of the 21st century thrown into serious doubt. At the time the Comcast ruling was issued, the FCC's Open Internet rulemaking proceeding was ongoing, not to mention its wide-reaching National Broadband Plan that was underway at the behest of Congress— and all of this was turned upside down by the revelation that it did not have authority to proceed on the basis of its understanding of its authority under the Communications Act. The feeling that this fight would be kept going was evident at the DC Circuit from the moment the *Comcast* case was heard: as people were filing out of the packed courtroom, a court staffer uttered, "See y'all in a couple of years…" He was right: a little over three years later, the same

court would decide a very similar case, with same judge writing the majority opinion and the same lawyer representing Verizon instead of Comcast, concerning the same issue of the FCC's authority to regulate broadband and enforce net neutrality. That case— *Verizon v. FCC*, decided in early 2014 as this dissertation was being completed— will be discussed in the Conclusion.

Some media advocacy groups had already called for the FCC to reclassify broadband to a Title II telecommunications service directly following the *Brand X* decision that solidified the Title I definition, but reclassification became something of a *cause célèbre* in communications policy circles after the *Comcast* decision made plain the full extent of its consequences.[73] Even though it had insisted on its authority to proceed with limited openness regulation of broadband providers under an ancillary authority understanding of Title I during the leadership of Chairmen Martin and Powell, the Genachowski FCC immediately hinted at reclassification in the wake of the *Comcast* ruling.[74]

As we will see in the following chapter, the *Comcast* decision came at a crucial moment in the negotiations over the Open Internet rules and pushed the FCC's proceeding in a new direction: the new wrinkle provided by the DC Circuit forced the FCC's hand by making its existing plan to regulate broadband via Title I unrealistic, but also left it an ace in the hole based on its clear ability to simply reclassify broadband to a Title II service. Indeed, this was an important subtext to the closed-door negotiations convened by the Commission between broadband and content providers, which will be covered in Chapter 4: although broadband providers were resistant to any rules, the FCC laid a compromise over the Open Internet rules on the table as desirable compared to the common carriage regulations in the drawer. As we will see in Chapter 5, defining broadband providers as telecommunications, classified under Title II and subject to common carriage regulation, is an alternative path readily available to the FCC in the

net neutrality battle that provides the most effective way forward for protecting the openness of the internet, but despite coming tentatively close, the Commission backed away in the face of the fight it would have to engage to make it happen. In the aftermath of what may perhaps be the definitive clash over net neutrality, *Verizon v. FCC*, I see the classification of broadband and its attendant definition as either information or telecommunications as the ultimate ground on which the net neutrality battle will be decided. The reason for this— seen in the work of legal scholars like Crawford and Nunziato traced below— is that is where FCC Open Internet policy will be aligned either with the common carriage tradition of democratic communications or with a publishers' rights model of editorial control of communications.

Regulatory terminology, common carriage, and democratic communications

Defining broadband as information rather than telecommunications comes with consequences for freedom of expression and role of the internet in a deliberative democracy. We will look in Chapter 6 at some ways that the FCC's classification decisions have worked to reshape the technological and industrial structures of internet access, but this is also a matter of reshaping the online public sphere. When internet access was defined as telecommunications in the days before broadband, the basic network infrastructure existed as a public resource for all to use on an open and equal basis because it was regulated in accordance with common carriage principles. The classification of broadband internet access as an information service removed these protections and instituted a fundamentally property-based regulatory regime that favors private control over the public good— not just through the shape of the physical infrastructure and the regulatory regime that broadband exists within, but also, as I argue, within the *discursive* bounds of that structure and the underlying assumptions about the role of internet access in society. Within these

structures, broadband networks— understood as an information service and not a telecommunications service— are the property of phone and cable corporations, solely under their control, the use of which by ordinary citizens is delimited and circumscribed to a position of consumption. This perspective brings into focus how net neutrality, and the common carriage principles that inform it, is important because it represents a democratic structure of participation in communications that encourages and enables ordinary citizens' creation and circulation of expression and information beyond interaction with content from established media industries. This section reviews how the regulatory principle of common carriage on which net neutrality is based relates to the First Amendment tradition of democratic communications. Building on the work of legal scholars such as Nunziato (2009) and Crawford (2009), I find that the denial of common carriage for the basic infrastructure of the internet has worked to privilege the free speech rights of media and telecommunications corporations at the expense of citizens.

The reshaping of open internet infrastructures and the erasure of net neutrality from internet access is part of a broader discursive shift which has enabled the denial of fundamentally democratic principles of equality and nondiscrimination from communications policy (Cherry 2011, Nunziato 2009). We will see below how defining broadband as an information service follows from and contributes to the naturalization of "negative liberty" (Berlin 1958) visions of democracy deployed in the corporate libertarian rhetoric that has underwritten the systematic dismantling of public interest obligations in media and communications policy. By working within the current classification of broadband, where the role of internet access providers is understood as more akin to publishers than as conduits for communication, policymakers are left on discursive terrain where government regulation is understood as undue intervention in the marketplace for free speech. This property-based discourse of freedom, Nunziato (2009) finds,

perverts the function of the First Amendment to a protection of a right to corporate censorship and diminishes the existence of public resources for democratic communications. It also, I would add, delimits conceptions of possible action to remedy this and "shapes that which it fails to describe" (Streeter 1996).

Regardless of the FCC's definition or industry discourse, internet access is, simply put, the essential general-purpose public communications service of our time. Crawford, as the most prominent scholarly advocate for a view of broadband as a public utility, has effectively established how— as with electricity and telephony— inclusion and participation in modern society now depends on a connection to the internet (2013). Although she too often couches the implications of the issue in the reductionist terms of economic opportunity and growth, Crawford shows how the internet fundamentally enables communication and information exchange and, therefore, a liberal democratic society that values and depends upon freedom of expression and information is obligated to ensure access to this infrastructure on a universal and equal basis (2009; 2010; 2013). However, network operators, Crawford argues, take a "taming, constraining approach to complex online communications by making them simple and predictable," as "deliberately degrading upload speeds and keeping high speed access for their own content" works to "dumb down users' relationships to this complex system" and reduces the diversity of ideas and interests represented (2009: 5-6).[75] Crawford's understanding of internet infrastructure as an essential public resource with public interest obligations that are being eroded by property-based neoliberal discourses, and her policy proposals based on a utility model of regulation, are an important intervention in the debates surrounding broadband access and net neutrality and will be revisited in the Conclusion.

The perspective on broadband infrastructure as a 'public good' brings into focus the ways

in which net neutrality is about more than media content distribution or technological innovation; rather, I assert, it represents a core factor in public democratic participation. Net neutrality is an issue that goes beyond online content providers having to pay more money to reach consumers or anticompetitive behavior by internet access providers— I argue that net neutrality is at bottom a principle for a more just and equitable structure for communications and connection. Especially with the rise of Web 2.0, social media, and mobile media since the mid 2000s, people have been able to use powerful internet media to connect to and create new groups and communities at a scale and scope previously impossible. I find this important not just for individual fulfillment and interpersonal relationships, but also for emergent publics and a well functioning representative democracy. The internet has not ushered in an ideal direct democracy and rarely facilitates the kind of rational critical deliberation expected from the limited Habermasian view of a successful public sphere, but the online participation and collaboration enabled in online spaces has contributed to the formation of more complexly interconnected subjectivities and collective identities and empowered citizens with access with expanded possibilities for their vernacular expressions and self-representations to meaningfully contribute to crucially— if not always self-evidently— political discourse (Papacharissi 2009, Dahlgren 2009, Benkler 2006). As discussed in Chapter 1, the internet is not an inclusive and participatory public sphere, but that is an ideal that is worth working towards, and an infrastructure that is accessible on more fair and open terms is a good first step in that direction.

That internet access is a public resource for communications essential to social inclusion and democratic participation is what makes necessary its regulation based on principles of common carriage. Seen through the terminology of the FCC's classifications, internet access service is a conduit that predominantly transmits end-users' communications, making it most

appropriately understood as a 'telecommunications' medium and, therefore, regulated to ensure common carriage protections for open and nondiscriminatory access.[76] Although common carriage has been frequently invoked throughout this dissertation, at this point a brief review of the history of the principle is warranted.

The common carriage tradition of democratic communications

Common carriage principles have governed basic general-purpose communications infrastructures in the US for over 150 years, but the tradition goes back centuries as the basis for equal treatment in the transport of people, goods, and messages, perhaps even to the Roman Empire.[77] The roots of modern common carriage regulation lie in 15th century English common law, where general transportation and communications services— even if provided by private actors like ship owners, innkeepers, and messengers— were considered to come with "public callings" that brought with them certain rights and responsibilities (Crawford 2009; Noam 1994; Sterling, Bernt, and Weiss 2000; Speta 2002).[78] The historical duties of common carriers are to: (1) serve all comers on an equal basis (nondiscrimination) and (2) to protect the goods they carry (liability for harm to goods). In exchange, common carriers typically enjoy privileges granted by the state, including: (1) license to operate a sole or dominant carriage service and use public rights-of-way to aid deployment (franchise authority) and (2) immunity with regard to the goods they carry (no liability for harm caused by goods) (Crawford 2009).

The provision of common carriage that most directly informs net neutrality principles is the first duty— the equal treatment of all. The source most commonly cited as the origin for the articulation of this nondiscrimination principle is a treatise on franchise law from English jurist Matthew Hale: in 1670 Hale described ports, bridges, ferries, and similar providers of general

transport services as private businesses that are "affected with the public interest" and therefore must "grant access to their property on equal terms without discriminating among applicants."[79] This formulation follows from the understanding that the state provides for essential social resources, but when the public is dependent on private entities to provide such services they have an obligation to ensure equal access to the public. The common carriage tradition can be understood as the state outsourcing some of its duties to businesses, but the theory underpinning it is not wholly or reductively based in liberal economics: any exclusive rights granted to carriers come with specific responsibilities to open and nondiscriminatory access, a tradeoff that ensures that their private property functions as a public commons. Common carriers, as private actors with public duties, can be considered to be standing in for the state in their performance of these basic functions.

Common carriage principles migrated across the pond to the American legal system and nondiscrimination protections have since been the central core of US communications policy (Pool 1983; Wu 2006; Cherry 2003). In addition to applications to private transportation providers like ships, stagecoaches, and inns, the federal government established the US Postal Service as a publicly owned common carrier and has operated it on an open and nondiscriminatory basis since. Communication used to be coterminous with physical transportation in a way that electric communications decoupled (Carey 1989)— subsequently further separated by electronic and digital communications— but because both the transport of goods and messages depend on wide-reaching material networks that function best when operated as an open commons, common carriage came to be fruitfully applied to communications infrastructure. The federal regulation of interstate railroad systems in the mid 19th century served as the precedent for the formation of common carriage policy for telegraph operators beginning in

the 1880s and extending to telephone services in the Mann-Elkins Act of 1910.[80] A comprehensive regime of common carriage established in the Communications Act of 1934 and overseen by the newly created FCC set up telecommunications services as transparent conduits to carry the public's information and expression. Duties to serve all equally and on reasonable terms were given to these communications services independent of any liability or market power which, Crawford argues, recognized nondiscrimination as the central obligation for common carriers and established openness for a basic general-purpose communications network as a necessity for democratic participation (2009: 880).

Common carriage— as a guarantee of open and equal access to the means of communication— is ultimately free speech policy,[81] but this construction means disavowing a currently favored interpretation of what free speech means. Two different traditions inform American understandings of freedom: as described by Isaiah Berlin (1958), "negative liberty" focuses on *freedom from* external interference, while "positive liberty" focuses on *freedom to* meaningfully participate in social structures. Philip Napoli traces an intellectual history of how these two traditions are closely associated with individual and collectivist interpretations of the freedom of speech, respectively (2001: 45-48). The negative liberty tradition focuses on the protection of individual free speech rights from unjust government intervention and emphasizes expression as important for individual autonomy and self-development. The positive liberty tradition instead focuses on protecting the social wellbeing of a collective citizenry and emphasizes fostering structures that maximize citizen expression and access to a diverse range of others' expression. Ultimately positive liberty sees freedom of expression not as an end in itself, but as a means to the end of a well-functioning democracy, which requires equitable access to and participation in the public sphere. The dominant discourse of free speech in recent decades,

however, is rooted in negative liberty, attendant by the rise of neoliberalism.

We can see, along these lines, a distinction between a "negative conception" and "affirmative conception" of the First Amendment. Nunziato sketches out these two interpretations of free speech and traces their influence on US communications law and policy generally, as well as net neutrality policy particularly (2009). She argues that as the affirmative conception has been diminished in policy discourse, state obligations to provide for public access to communications have been eroded. Laura Stein (2007) writes of what she calls the "defensive" and "empowering" approaches to free speech and their impact on democratic communications. Stein conceives of the empowering tradition in line with participatory democratic theory that emphasizes citizens' rights to speak and be heard, including government intervention to facilitate the exercise of those rights. Meanwhile, she aligns the defensive tradition with neoliberal ideology that presumes that speech is truly free only in privately controlled spaces in the absence of government intervention. Nunziato's affirmative and negative conceptions function similarly.

In the negative conception of the First Amendment, individual autonomy is primary and the role of the state is to simply refrain from interference. Nunziato forwards the organizing metaphor for this view as Supreme Court Justice Oliver Wendell Holmes' "marketplace of ideas:" in a free market without government intervention, the negative conception asserts, the best ideas will naturally win out (2009: 24). In addition to a trust in marketplace competition, this conception fundamentally relies on property ownership to function: relying on private property to facilitate expression is seen as a way to wall off this marketplace from undue government intervention. There are several problematic aspects of the negative conception of the First Amendment. For one, relying on free speech via private property concentrates power over

communications to those major media and telecommunications firms that own this property. Additionally, we cannot depend on a faith in the market to provide for a diverse range of perspectives and 'the invisible hand' of marketplace competition to decide among them what is best. Further, by conceiving of the First Amendment as placing restrictions only on the state, censorship by private actors is not only allowed, but as we will see below, can even be protected.

The affirmative conception of the First Amendment, on the other hand, is based in democratic values that go beyond property rights and operate independent of the market. As Nunziato points out, the 'marketplace of ideas' is at best an aggregation of private preferences and at worst dominated to the degree to which it empowers unrestrained private regulators of speech (2009: 29). Truly democratic communications allows for and protects marginalized perspectives and unpopular ideas, in a way that cannot be achieved through the marketplace alone. (An example of an affirmative approach from the context of broadcasting policy would be the Fairness Doctrine.) This is important for reasons of fairness and equality, but beyond that it is a necessary part of deliberative democracy. As legal scholars like Cass Sunstein have explained, broad citizen communication is the best way to provide the wide and diverse range of conflicting viewpoints necessary for informed collective decision making and to ensure public participation in deciding public issues that democratic self-government necessitates (1995). For these reasons, the affirmative conception of the First Amendment justifies state intervention into communications to public access and participation.

Nunziato asserts that the affirmative conception of the First Amendment historically underlies a coherent regulatory regime to facilitate the flow of information and act as a check on the power of media and telecommunications gatekeepers, especially at key moments of media emergence. She points to policies such as public forum doctrine, state action doctrine, the fairness

doctrine, must-carry obligations, and common carriage as part of an affirmative tradition (2009: 24-70). Nunziato explains: "The affirmative conception of the First Amendment recognizes that individuals have a right to participate in democratic self-government by expressing their views, and in turn by being exposed to a diversity of viewpoints, on matters of societal and public importance. These rights create correlative, affirmative obligations on the part of would-be powerful censors— whether public or private— to facilitate a diverse range of speech… The state is justified in regulating powerful private conduits and private owners of forums for speech where necessary to facilitate such speech" (2009: 32). Disavowing the negative conception where the role of government is simply to stay out of the way, Nunziato states that "in order to advance the core free speech goals that are essential to a well-functioning democracy, the state may need to do more than nothing…" (Ibid.). The affirmative conception of the First Amendment has remained in American political traditions and enjoyed different degrees of influence in history, but especially flourished during the early to mid 20th century's Progressive Era through Great Society Era, making its mark in particular on early broadcasting (see Pickard, Forthcoming).

Common carriage is, in Nunziato's words, "one of the most important representations of the affirmative conception of the free speech guarantee" (2009: 66). In providing for nondiscriminatory access to conduits for expression, common carriage is a necessary affirmative guarantee to a public ability to communicate. As ever more of culture and politics became mediated in the 20th century, and all the more true today, public communications depends on private facilities, so a guarantee to free speech means placing public obligations on private property. As seen the work of legal scholars like Ammori (2012) and Balkin (2008a, 2008b), the First Amendment can be laudable in theory but meaningless in practice without "free speech infrastructure" and widespread affordances for citizens to speak and actually be heard. To ensure

these means to communications is exactly the sort of affirmative obligation that a democratic state ought to uphold. To facilitate an open flow of public communications, though, means placing limitations on what privately owned network operators can do: common carriage prioritizes the collective free speech rights of citizens over the private property rights of network operators, which is anathema in the negative conception. We will see below the implications of the discursive struggle between these conceptions of this issue.

Common carriage is part and parcel of the inherently public function of providing basic communications infrastructure. The primary beneficiaries of building and operating communications infrastructure are ultimately citizens, regardless of whether it is provided on a public service basis by the state or on a profit-driven basis by corporations. The common carriage tradition is built on the basic understanding that the public necessity for communication is too important to leave its provision up to purely private interests, so when the responsibility for this infrastructure is left up to the private sector, it comes with obligations to inclusive and equal treatment. The relationship between the state and the provision of basic infrastructural services has been throughout history a very close one, for reasons related to general-purpose infrastructure's role as a 'public good' that acts as a common resource for a broad range of social and economic actions and the 'market failure' typically encountered when it is left up to private entities alone to provide for it (these dynamics are discussed at further length in Frishmann 2013 and in Chapter 1 of this dissertation). In fact, the US is one of the only developed countries around the world that relies on private commercial businesses for so much of its communications infrastructure, revealing how much basic public interest regulations like common carriage make up the bare minimum of reasonable protections to count on.

This fundamentally public role of open communications infrastructure provision further

puts common carriage in line with the affirmative tradition of 'state action' doctrine. State action doctrine treats private entities that perform public duties as equivalent to the state for legal purposes, going beyond formalistic distinctions between public and private and focusing instead on the function being undertaken and the values necessary to be protected in it (Nunziato 2009: 88-115). If public access to the means to communicate is denied by a private facility owner or citizens' expression is blocked by a private gatekeeper, under state action doctrine that should be considered as much a violation of the First Amendment as state censorship. Consistent with the broader shift to the negative conception of free speech in recent decades, however, state action doctrine has now all but disappeared. As we will see below, this interpretation of free speech leaves censorship by corporations not only insulated from the First Amendment but perhaps even endorsed by it.

Common carriage is also related to the affirmative tradition of making public spaces available for free expression, known as 'public forum doctrine.' It is a baseline necessity for actually existing free speech for the state to dedicate public property that is well suited to the exchange of ideas for use for public communication and afford expression there the foremost protection under the law. The existence of such public forums is designed as an affirmative commitment to address inequality in property ownership and how it works to privilege the speech of the powerful. Without some open space and common resources through which anyone can speak and be heard, no matter how marginalized they or their views are, then free speech ends up favoring those who own the means of communication or who are socially positioned to more easily access them. One reason why 'taking to the streets' remains such a powerful tactic, and trope, in social movements is that streets— along with public parks and government buildings that symbolize the state, such as capital buildings and courthouses— have been particularly

important and visible public forums for dissent throughout the history of liberal democracies. However, the neoliberal wave of privatization in recent decades has left very little public space— in most US cities, the equivalent to the town square is now the mall— and the space that remains today for protest at prominent public sites is often tellingly limited to fenced-off 'free speech zones' (implicitly declaring everything around it 'no free speech zones').

As it has arisen in conjunction with a current 'common sense' of free speech as a negative liberty, the function of the internet as public space is ambiguous at best. In Chapter 1 I explored the possibilities for the internet to serve as a public sphere and in the Conclusion I will discuss the ability of public ownership of internet infrastructure to encourage that. As we have seen with the tradition of common carriage, though, as underwritten by an affirmative discourse of free speech, it is possible to make private property function as public resources through regulation. However, in light of the dominant negative conception of the First Amendment that has come to surround it, Nunziato argues that, contrary to popular belief, the internet has not served as an antidote to the disappearance of public forums in physical space, but is perhaps only intensifying the trend (2007). Even though there is a tremendous amount of vital expression online— the internet has enabled a great multiplication of the quantity and reach of public communications— the spaces in which this expression occurs and the resources upon which it depends are almost without exception privately owned and operated. This means that, at least as US law is now read, users' communications online are ultimately not protected by the First Amendment and are under the control of the owners of the private spaces where they take place. Even if internet media has increasingly come to function as a public forum for all intents and purposes, it is not protected as such— legally speaking, there is no equivalent to the town square on the internet. Indeed, in addition to the examples of broadband providers blocking and degrading internet traffic, a rapidly

emerging body of literature led by communication and media scholars such as Gillespie (2010), Sandvig (2011), and Fernando Bermejo (2013) explains the ways in which social media and other online services are not open platforms, but manage and exclude some speech and speakers in ways obscured through the use of opaque algorithmic techniques.

As we have discussed above, net neutrality principles are based in the common carriage tradition, which puts it in line with the affirmative conception of the First Amendment and state intervention to the encouragement of free expression. Blocking or discriminating amongst internet traffic should be considered censorship whether it is a government or corporate force responsible for it. Indeed, broadband providers are, as a function of their bottleneck position with regard to internet access networks, perhaps the most powerful speech regulators in the US, public or private. Beyond preventing interference with free speech online, though, the state has an obligation to provide for the conditions necessary for that speech to be able to happen in the first place. Broadband providers own internet infrastructure and wish to control it as their private property to do with what they please, but as a general-purpose communications network, internet access is a socially and politically essential resource that ought to be universally available on an open basis. That net neutrality is typically thought of in simplistic terms of avoiding censorship and not as a progressive assurance for democratic structures for communication speaks to the degree to which the terms remain set by the network operators, even within net neutrality advocacy.

Understanding what net neutrality is about, let alone securing policy implementations of its principles, is made difficult by having to work within discursive terrain dominated by corporate visions of negative liberty. The ‘common sense’ of the First Amendment today is that it can only apply to the government and has no bearing whatsoever on corporations and other private

parties— even progressive free speech advocates misguidedly concede this.[82] While not consistently the case through history, this discourse has become a self-fulfilling prophecy as deregulation of communications since the 1970s shaped by the negative sense of free speech has left the policies of the affirmative tradition decimated. The rise of neoliberal market fundamentalism has brought with it a literal reading of the First Amendment in the courts that leaves the state's role as by definition doing nothing in regard to free speech— "Congress shall make no law," after all. In this interpretation, any kind of government intervention— even affirmative action in the service of the free speech guarantee— is undue intrusion into the free market of ideas. Action to assure free speech in an affirmative sense becomes action to obstruct free speech in a negative sense. It is in this environment that, as legal scholars like Cherry (2011) argue, corporate free speech rights have become strengthened at the expense of citizen free speech rights. The paradigmatic example of this is the Supreme Court's 2010 *Citizens United* decision authorizing unlimited corporate campaign donations in the name of free speech, while also rolling back common carriage regulations and troubling the implementation of net neutrality as along these lines (ibid.). We will look below at this dynamic in the case of the Open Internet regulations.

A keyword in this discourse has been *competition*. As part of the wave of deregulation that especially took hold in the 1980s in the US, the core nondiscrimination provisions of common carriage have been removed from communications policy as public interest principles have been steadily replaced with measures to supposedly promote marketplace competition. Although common carriers are often dominant in the marketplace, whether via government-granted franchise or 'natural monopoly' status, market power was never historically a prerequisite to common carriage regulation of communications networks (Nachbar 2008). Nonetheless, the FCC

asserted in the early 1980s that the rationale for nondiscrimination rules is based only in protection against abuse of monopoly position. This was a major shift in the interpretation of common carriage doctrine, in essence finding that equality in access to communications networks is not important in and of itself due to the "public calling" of these services and their essential role in society and democracy, but rather important only in that discrimination can be used anticompetitively in the marketplace. As a result, the presumption is now established in communications policy that unreasonable discrimination is only problematic if undertaken by a monopolist and that competition is itself a satisfactory remedy to discrimination (Crawford 2009: 882-883). This meant that when the Bell monopoly break-up was finalized in the MFJ, telephone services immediately became drastically deregulated, ushering in the new 'competition' regime in communications policy that was the basis for the Telecommunications Act of 1996.

This rise of 'competition' as a supposed panacea comes not just from neoliberal views but also related libertarianism. As Streeter has shown, especially in the context of internet communities and industries, cyber-libertarian discourse has been linked with neoliberalism which has contributed in troubling ways to the privileging of corporate control (2010; see also Turner 2002). The problematic nature of this can be seen in the work of cyber-libertarian-informed organizations that support net neutrality in principle but simultaneously want the government to keep its 'hands off the internet.'[83] As a prominent example, the EFF, a leader in the digital rights movement, considers itself a proponent of net neutrality, but has advocated against nearly all formal state internet policy as troubling 'regulation of the internet.'[84] The EFF is suspicious of any sort of government intervention, so it sees net neutrality not as an issue of public guarantees to basic infrastructure and democratic participation like those typically associated with the state, but as an informal principle for network governance to keep powerful institutions away from

what should be a free wheeling Wild West. The idea here is that freedom of expression best comes out of the perfect competition that would somehow arise given the absence of government regulation— essentially just a more principled version of the same libertarian discourse that corporations disingenuously espouse to shore up support for their work dismantling the state and privatizing public resources.

Whether libertarian principles are defended sincerely by true believers or deployed cynically to justify the corporatization of ever more of society, it ultimately relies on a flawed vision of freedom consistent with the conception of negative liberty. The notion that a purely private space, beyond the regulatory reach of the state, will enable freedom simply by being unencumbered by government intervention is a myopic and untenable position. There is no such thing as pure freedom, in the sense of being unrestrained by any kind of regulation— look no further than the corporate control of neoliberal societies to see how the absence of public regulation only opens up room for private regulation. Without some sort of check from public power, private power will dominate. As problematic as entrusting too much power to government can be, there must a role for the state in assuring democratic communications— there must be a collectively responsible steward of public resources and protector against private control. Although government corruption and corporate influence troubles the viability of this view, it is ultimately better to trust the devil you can vote out than the devil you cannot.

This discourse of 'competition' remains the limiting baseline within which net neutrality discourse has had to work. Rather than arguing for public protections for an open internet infrastructure in a more democratic system of communications, even proponents too often fall back on arguments about competition in the broadband market.[85] Even though the broadband market is not satisfactorily competitive, that misses the point: marketplace competition on its

own is not enough to protect the public interest. As Streeter points out, by giving into debates about competition in media markets we have already accepted this corporate liberal discourse and precluded any debate over the merits of a market structure itself (1996).

The discourse of negative liberty traced above has not only facilitated the rollback of common carriage but also shapes views of net neutrality's relation to the freedom of speech. The consequences of broadband's definition as an information service not only insulates internet access providers from common carriage regulation— as we will see the *Verizon* decision made clear— but also favors a role for them as content publishers over a position as a conduit for others' content, privileging their autonomy as private property owners over public access to infrastructure for democratic communications.

This quibbling over terms— whether it is "reasonable" to define "broadband" as an "offering" of "information" or as an "offering" of "information" combined with "telecommunications"— can be bewildering and exhausting. It is more than just words games, however— as I argue, it is important because it brings with it great consequences for the shape of the internet and what users can do with it. We will see later on in this dissertation, especially in Chapter 6, how the industrial and technological structures of the internet have been reshaped as a result. Before we get to that, however, let us take a look at how the Open Internet policy that resulted from this discourse came into being by tracing the policymaking process.

Notes

[1] I should also mention here that I have acquired helpful background knowledge on the regulatory terminology covered in this chapter from the informal discussions among internet and telecommunications lawyers and policy practitioners that take place on the email listserv Cybertelecom. Mailing list. *Cybertelecom*. 2010-2014. Web. http://www.cybertelecom.org/cybert.htm.

[2] 47 USC Sec. 151.

[3] 47 USC Sec 151(a).

[4] 47 USC Sec. 153(46).

[5] 47 USC Sec. 153(43).

[6] 47 USC Sec. 153(20).

[7] 47 USC Sec 151(a).

[8] Ruling, In the Matter of Use of the Carterfone Device in Message Toll Telephone Service ("Carterfone"), 13 FCC 2d 420 (1968), http://www.uiowa.edu/~cyberlaw/FCCOps/1968/13F2-420.html; Modification of Final Judgment ("MFJ"), *US v. AT&T*, 552 F. Supp. 131, 229, (DDC 1982), http://web.archive.org/web/20060830041121/http://members.cox.net/hwilkerson/documents/AT&T_Consent_Decree.pdf.

[9] Final Decision, Second Computer Inquiry ("Computer II"), 77 FCC 2d 384 (1980), http://en.wikisource.org/wiki/Second_Computer_Inquiry/Final_Decision.

[10] Computer II, para. 19.

[11] 47 CFR Sec 64.702(a) (2002).

[12] *Midwest Video II*, 440 US 689 (1979), http://supreme.justia.com/cases/federal/us/440/689/.

[13] 47 USC Sec. 153(20).

[14] Report to Congress ("Stevens Report"), Federal-State Joint Board on Universal Service, 13 FCCR (1998), http://transition.fcc.gov/Bureaus/Common_Carrier/Reports/fcc98067.pdf.

[15] *Brand X*: 1012-1013.

[16] Stevens Report: para. 81.

[17] Stevens Report: para. 69, n. 138.

[18] Cable Modem Order, 17 FCC Rcd. 4798 (2002), http://askcalea.fbi.gov/archives/docs/20020315.fcc.02-77.pdf.

[19] *AT&T v. City of Portland*, 216 F3d 871 (9th Circuit, 2000).

[20] Wireline Broadband Order of 2005.

[21] Cable Modem Order of 2002: 4802, para 5.

[22] *Brand X* (2005).

[23] *Chevron v. Natural Resource Defense Council*, 467 US 837 (1984).

[24] *Brand X*: 17.

[25] *Brand X,* Justice Scalia, dissenting (2005): 3-4.

[26] Letter to Chairman Julius Genachowski, *Re: Preserving the Open Internet*, GN Docket No. 09-191 (April 30, 2010): 5.

[27] See: Wireline Broadband Order of 2005; Declaratory Ruling, *Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks* ("Wireless Broadband Order"), 22 FCC Rcd. 5901 (2007), http://www.govexec.com/pdfs/041510d1.pdf.

[28] See: AT&T Petition to Launch a Proceeding Concerning the TDM-to-IP Transition, FCC GN Docket No. 12-353 (2012), http://www.att.com/Common/about_us/files/pdf/fcc_filing.pdf. This is a very strange proceeding ongoing at the time of this writing. The regulatory fight also involves how to classify (and therefore how to regulate) VoIP, including differences between facilities-based VoIP like the cable companies and over-the-top VoIP like Skype.

[29] Roth, Daniel. "The Dark Lord of Broadband Tries to Fix Comcast's Image." *WIRED*. 19 Jan. 2009. Web. 03 July 2014. http://archive.wired.com/techbiz/people/magazine/17-02/mf_brianroberts?currentPage=all.

[30] Robb Topolski (as: funchords). "Comcast Is Using Sandvine to Manage P2P Connections." Discussion forum post. *DSLReports*. 11 Mar. 2001. Web. 03 July 2014. http://www.dslreports.com/forum/remark,18323368.

[31] Svensson, Peter. "Comcast Blocks Some Internet Traffic, AP Testing Shows." *The Washington Post*. 19 Oct. 2007. Web. 01 July 2014. http://www.washingtonpost.com/wp-dyn/content/article/2007/10/19/AR2007101900842.html; Svennson. "AP Tests Comcast's File-sharing Filter." *USA Today*. 19 Oct. 2007. Web. 03 July 2014. http://usatoday30.usatoday.com/tech/products/2007-10-19-2072341885_x.htm; Schoen, Seth. "EFF Tests Agree with AP: Comcast Is Forging Packets to Interfere with User Traffic." Blog post. *Electronic Frontier Foundation*. 19 Oct. 2007. Web. 03 July 2014. https://www.eff.org/deeplinks/2007/10/eff-tests-agree-ap-comcast-forging-packets-to-interfere; Eckersley, Peter. "Comcast Is Also Jamming Gnutella (and Lotus Notes?)." Blog post. *Electronic Frontier Foundation*. 20 Oct. 2007. Web. 03 July 2014. https://www.eff.org/deeplinks/2007/10/comcast-also-jamming-gnutella-and-lotus-notes; Cheng, Jacqui. "Evidence Mounts That Comcast Is Targeting BitTorrent Traffic." *Ars Technica*. 19 Oct. 2007. Web. 03 July 2014. http://arstechnica.com/uncategorized/2007/10/evidence-mounts-that-comcast-is-targeting-bittorrent-traffic.

[32] Ernesto. "COMCAST THROTTLES BITTORRENT TRAFFIC, SEEDING IMPOSSIBLE." Blog post. *TorrentFreak*. 17 Aug. 2007. Web. 03 July 2014. http://torrentfreak.com/comcast-throttles-bittorrent-traffic-seeding-impossible/.

[33] Svensson, "Comcast Blocks Some Internet Traffic."

[34] Ibid.

[35] Ibid.

[36] A Comcast spokesman stated: "We're not blocking any access to any application, and we don't throttle any traffic." Marguerite Reardon, "Comcast Denies Monkeying with BitTorrent Traffic," CNET News, 21 August 2007, http://www.cnet.com/news/comcast-denies-monkeying-with-bittorrent-traffic/.

[37] Comcast Order, 23 FCC Rcd. 13,028 (2008) https://apps.fcc.gov/edocs_public/attachmatch/FCC-08-183A1.pdf: 4-5

[38] Comcast Order: 5

[39] Svennson. "Groups: Fine Comcast for Net Meddling." *USA Today*. 1 Nov. 2007. Web. 03 July 2014. http://usatoday30.usatoday.com/tech/news/2007-11-01-comcast-data-discrimination_N.htm.

[40] Eckersley, Fred Von Lohman, and Schoen. *Packet Forgery By ISPs: A Report on the Comcast Affair*. Rep. Electronic Frontier Foundation, 28 Nov. 2007. Web. 03 July 2014. https://www.eff.org/wp/packet-forgery-isps-report-comcast-affair.

[41] Ibid.

[42] Formal Complaint of Free Press and Public Knowledge Against Comcast Corporation For Secretly Degrading Peer-to-Peer Applications, FCC GN Docket No. 08-183, 1 November 2007, http://publicknowledge.org/pdf/fp_pk_comcast_complaint.pdf.

[43] Internet Policy Statement, 20 FCC Rcd. 14986 (2005), https://apps.fcc.gov/edocs_public/attachmatch/FCC-05-151A1.pdf.

[44] Bangeman, Eric. "Comcast Shooting Itself in the Foot with Traffic Shaping "explanations"" *Ars Technica*. 23 Oct. 2007. Web. 03 July 2014. http://arstechnica.com/uncategorized/2007/10/comcast-shooting-itself-in-the-foot-with-traffic-shaping-explanations/.

[45] Kang, Cecilia. "Comcast's Network Practices Need Scrutiny, FCC Chief Says." *The Washington Post*. 23 Apr. 2008. Web. 03 July 2014. http://www.washingtonpost.com/wp-dyn/content/article/2008/04/22/AR2008042202753.html.

[46] Comcast Order: 5

[47] Jewell, Mark. "Allegations Fly in FCC Hearing Aftermath." *NBC News*. 27 Feb. 2008. Web. 03 July 2014. http://www.nbcnews.com/id/23359972/ns/technology_and_science-internet/t/allegations-fly-fcc-hearing-aftermath/#.U7YDsI1dUaA.

[48] Lasar, Matthew. "Comcast, Net Neutrality Advocates Clash at FCC Hearing."*Ars Technica*. 25 Feb. 2008. Web. 03 July 2014. http://arstechnica.com/uncategorized/2008/02/comcast-and-net-neutrality-advocates-clash-at-fcc-hearing/.

[49] Ibid.

[50] Ibid.

[51] Ibid.

[52] Comcast Order (2008).

[53] Ibid.: 24.

[54] Ibid.: 29, 52-53.

[55] Sohn, Gigi. "FCC's Comcast Decision Scratches a 20-Year Itch." Blog post. *The Huffington Post*. 04 Aug. 2008. Web. 03 July 2014. http://www.huffingtonpost.com/gigi-sohn/fccs-comcast-decision-scr_b_116804.html.

[56] Ibid.

[57] Bode, Karl. "Kevin Martin Doesn't Hate Cable, He Just Loves Ma Bell." Blog post. *DSLReports*. 14 Nov. 2007. Web. 03 July 2014. http://www.dslreports.com/shownews/Kevin-Martin-Doesnt-Hate-Cable-He-Just-Loves-Ma-Bell-89456.

[58] Bode. "Was The FCC Comcast Investigation A Farce?" Blog post.*DSLReports*. 31 July 2008. Web. 03 July 2014. http://www.dslreports.com/shownews/Was-The-Entire-FCC-Comcast-Investigation-A-Farce-96597.

[59] Anderson, Nate, and Eric Bangeman. "Comcast Loses P2P Religion, Goes Agnostic on Throttling." *Ars Technica*. 19 Sept. 2008. Web. 03 July 2014. http://arstechnica.com/uncategorized/2008/09/comcast-loses-p2p-religion-goes-agnostic-on-throttling/.

[60] *Comcast v. FCC*, 600 F3d 642 (DC Cir. 2010), http://www.cadc.uscourts.gov/internet/opinions.nsf/EA10373FA9C20DEA85257807005BD63F/$file/08-1291-1238302.pdf.

[61] Opening Brief for Petitioner Comcast, *Comcast v. FCC* ("Comcast Brief"), DC Cir. Case 08-1291, http://cdn.arstechnica.net/Comcast%20Opening%20Brief%20%28as%20filed%29.pdf: 41.

[62] Transcript of Oral Argument, *Comcast v. FCC*, DC Cir. Case 08-1291 http://cdn.arstechnica.net/CaseN08-1291ComcastvFCC.pdf: 14.

[63] Dissenting Statement of Commissioner Robert McDowell, Comcast Order, http://cloudfront-assets.techliberation.com/wp-content/uploads/2008/08/DOC-284286A6.pdf: 7.

[64] Internet Policy Statement of 2005.

[65] Transcript of Oral Argument, *Comcast v. FCC*: 68-69.

[66] Ibid.

[67] Ibid.

[68] *Comcast v. FCC* (2010).

[69] *American Library Assoc. v. FCC*, 406 F3d 691-2 (DC Cir. 2005). The prototypical "ancillary authority" example is with cable. The FCC's limited ability to regulate cable television services is authorized because of its relation to broadcast television, which it is directly authorized to regulate. According to ancillary authority, the Commission must be able to oversee those aspects of the cable industry that affect the broadcast industry. See: *US v. Southwestern Cable Co.* 392 US 157 (1968).

[70] *Comcast v. FCC* (2010).

[71] 47 USC Sec. 230(b).

[72] *Comcast v. FCC* (2010).

[73] See, e.g.: Reply Comments of Public Knowledge, *In the Matter of A National Broadband Plan for Our Future*, FCC GN Docket No. 09-51, 26 January 2010, https://www.publicknowledge.org/pdf/pk-nbp-replies-reclass-20100126.pdf.

[74] Higginbotham, Stacey. "Comcast vs FCC: In Battle For Net Neutrality, Did the Courts Hand Comcast a Pyrrhic Victory?" *Gigaom*. 6 Apr. 2010. Web. 03 July 2014. <http://gigaom.com/2010/04/06/did-the-courts-hand-comcast-a-pyrrhic-victory/>.

[75] Julie Cohen raises similar points about people's relationships online and how they are facilitated by the shape of the infrastructure (2013).

[76] Of course, in addition to carrying communication among and between everyday end-users through social media and other many other means, internet access also transmits published content like films and television programs. Looking at the volume of Netflix traffic on any given evening shows clearly that streaming video is also a predominant use of internet access service. However, in this case, online content providers like Netflix are themselves also end-users of internet access services, in the sense in which any party that 'uses' the broadband network but does not own it is. That is, when I say that communication among users is the predominant use of broadband service, I am referring to the transmission of any online content that broadband providers themselves did not publish. This is what it means to say that internet access providers are more appropriately understood as carriers

and not publishers: the overwhelming majority of the stuff on the internet is not theirs, but others' that they are paid to carry.

[77] See: "From Ships to Bits." *The Economist*. 15 May 2010. Web. 03 July 2014. http://www.economist.com/node/16106593.

[78] The two bodies of English common law that common carriage principles come from are bailment law, where carriers are responsible for the safe passage of the goods they carry, and franchise law, where companies allowed by the state to provide for general transport services must provide those services equally.

[79] Matthew Hale, "A Treatise in Three Parts," *Collection of Tracts Relative to the Law of England* 1.72 (Hargrave ed., 1787).

[80] Pacific Railroad Acts (1862-1874); Telegraph Lines Acts (1866-1888); Interstate Commerce Act of 1887; Mann-Elkins Act of 1910.

[81] Common carriage is only effectively a free speech policy when combined with the principle of universal service, a closely related but ultimately adjacent regulatory doctrine. I am grateful to Michael Curtin for this point.

[82] E.g.: Karr, Timothy. "Censorship = Freedom?" Blog post. *Free Press*. 16 July 2012. Web. 04 July 2014. http://www.freepress.net/blog/2012/07/16/censorship-freedom.

[83] Thierer, Adam. "Net Neutrality: A Christmas Gift for Washington Lawyers & Lobbyists." Blog post. *Technology Liberation Front*. 21 Dec. 2010. Web. 04 July 2014. http://techliberation.com/2010/12/21/net-neutrality-a-christmas-gift-for-washington-lawyers-lobbyists/#more-33760.

[84] McSherry, Corynne. "Is Net Neutrality a FCC Trojan Horse?" Blog post. *Electronic Frontier Foundation*. 21 Oct. 2009. Web. 04 July 2014. https://www.eff.org/deeplinks/2009/09/net-neutrality-fcc-perils-and-promise.

[85] See, e.g.: "Comments of Free Press," In the Matter of Preserving the Open Internet, FCC GN Docket No. 09-191, http://www.freepress.net/sites/default/files/fp-legacy/Free%20Press_09-191_Comments.pdf.

Chapter 4

Negotiating Net Neutrality in Open Internet Policymaking

This chapter investigates the policymaking process for the FCC's 2010 Open Internet rules. It follows the FCC's Open Internet proceeding from the rules' proposal in 2009, to their adoption in 2010, until the official enactment in 2011, bringing aspects of cultural studies, political economy, and political science approaches to an understanding of power and process in media policy advocacy, public participation, and policymaking. Looking at interactions in the process by corporations, advocacy groups, and members of the public, this chapter draws from comments, filings, and statements in and reportage on the official proceeding, as well as the messages and commentary that circulated around the policy arena in corporate and advocacy group messaging and everyday citizens' remarks. My analysis is based in particular on a close reading of key documents in the process, such as the proposal put together by Google and Verizon that was most influential on the rules as adopted, as well as a large swath of filings in the proceeding. In addition to this focus on the official policymaking process, I did what the FCC did not do: go where the people are. That is, I did not limit my understanding of the net neutrality debate to that which has occurred in the official policy sphere, but included the vibrant discussions of the issue in online social media from everyday internet users that represents vital participation that was kept severely circumscribed by policymakers. Finally, my analysis of these documents is augmented by trade press and policy beat reporting and written and oral history accounts of and commentary from insider participants on a process that, as we will see, included consequential dealings going on behind closed doors, with no official documentation.[1]

The analysis here concentrates on three particular sets of relations among stakeholders on various sides of the net neutrality debate, each elaborated in its own section. The first considers citizens and media advocacy groups. Looking in particular at Free Press's Save the Internet campaign and Americans for Prosperity's Internet Freedom Coalition and these groups' interactions with and actions on behalf of citizens in the policymaking process, the analysis here is concerned with how public opinion and the voice of 'the people' get represented in the policy sphere. It concentrates on the degree to which citizens are able to directly participate in this process in a meaningful fashion and how much media advocacy organizations channel public discourse to policymaking discourse. The second considers broadband providers and civil rights groups. It particularly looks at the complex and contradictory reasons why some organizations representing communities of color such as the Minority Media & Telecommunications Council advocate against net neutrality policy, related to their political economic and discursive connections to broadband providers including AT&T and Comcast. The third considers online content providers and broadband providers. It specifically focuses on the negotiations brokered by the FCC between these two sets of companies with the most financially at stake on either side of the net neutrality debate and how out of this the powerful 'frenemies' Google and Verizon came to write their own rules— which would then become the official Open Internet rules.

I argue that each of these intersections— citizens and advocacy groups, advocacy groups and corporations, and corporations with rival corporations— are crucial points of negotiation that represent particular aspects of the complex adversarial and coalitional dynamics across and among the stakeholders involved in the policymaking process. Looking at how this played out in the process of making the FCC's Open Internet rules provides insights into the way media policy discourse is represented, channeled, deployed, contested, and compromised in and out of the

official policy sphere and how the material and discursive power relations between participants has influenced the policy in question.

Looking across these sites in the net neutrality policy debate also helps explicate some of the tensions between the keywords of *inclusion* and *participation*. This analysis reveals lines of who is included in the policymaking process and on what terms they are able to participate, as well as the visions of inclusion and participation in media that are articulated within the discourse operative in that process. I argue that these disconnections between inclusion and participation have political consequences, by circumscribing those who may enter and intervene in the policy sphere but also, as an effect of this, restricting who may speak and be heard in the larger public sphere through its consequences for the shape of internet infrastructures. This is a crucial matter for democratic communications, felt through the limited equality and fairness of both policy processes and social outcomes related to net neutrality. The case of the FCC's Open Internet proceeding, I assert, demonstrates how crucially needed consistent and expanded inclusion, representation, and, most importantly, meaningful participation are in the media policymaking process, for both a more democratic policy process and more democratic policy outcomes.

While different aspects of the net neutrality policy process have been covered in other scholarship, this chapter presents original research that develops new depth into these events. Others have traced the lines of the policy process and the debates surrounding it, but they tend to paint with rather broad strokes (e.g., Hart 2011). When academic work has focused on the dynamics of the discussions shaping net neutrality in and around the policy sphere, it has tended to be wider scale quantitative content analysis. A pair of studies looking at how the net neutrality debate has functioned in the mainstream media (Kim, Chung, and Kim 2011) and in online

media (Herman and Kim 2014) provides an empirical baseline for my understanding: the former found corporate interests best represented in mainstream media accounts, the latter found that discussions taking place on the internet were much more supportive of net neutrality. This serves as useful contextualization but my analysis here is based on drilling deeper into case study research and applies a qualitative interpretive approach with more critical and discursive sensibilities. In-depth readings of documents like public comments, advocacy group filings, and, the corporate plan of Google and Verizon from this perspective are notably missing from net neutrality scholarship. This is part of what I am able to do by developing extended discussion and analysis of net neutrality discourse and the policy process around it— a valuable contribution to a literature with few book-length treatments of the issue (Nunziato 2009, van Schewick 2010, and Crawford 2013 as exceptions) and none from a non-lawyer's perspective.

I will note here that my understanding of public participation in media policymaking is informed by Seeta Peña Gangadharan's "deliberative standard" (2013), which calls for more legitimate public involvement in FCC rulemaking procedures and outcomes through support from advocacy groups. A pragmatic approach between limiting pluralist or idealistic communitarian visions, Gangadharan's deliberative model depends on two facets of public participation— inclusion and translation— that amount to a process where outside public discussions of policy issues are represented inside the official policy sphere by advocacy groups. Although there were attempts to work along these lines in the FCC's Open Internet proceeding, I show how Gangadharan's deliberative model played out unevenly in practice in this case. In particular, the disjuncture between necessary inclusion and meaningful participation was key: we will see how citizen voices were included in the policymaking process in ways circumscribed and reified by policymakers and advocacy groups and that the most meaningful participation in

determining the outcome of the rules as adopted was from the same corporations whose influence was felt all along. Let us then turn first to a case study of the involvement of citizens and advocacy groups.

"The people," media advocacy, and public comments at the FCC

As communications policy issues go, net neutrality has sparked a remarkable amount of popular discussion and public engagement. As previous chapters have discussed, although unlikely for such a seemingly arcane and technical regulatory matter, net neutrality struck a chord with large numbers of people and sparked something of a grassroots movement to push for broadband openness policy. Close to two million individuals and nearly a thousand civil society groups spoke out for net neutrality and the FCC received more than a hundred thousand public comments submitted to the Open Internet proceeding during the official window from 2009-2010.[2] This citizen engagement with the FCC on the issue of net neutrality did not develop spontaneously out of nowhere, though, but was the product of intricate interactions between media advocacy campaigns, the Commission, and everyday internet users. This section discusses public participation in Open Internet policymaking at the FCC and traces the relationships between citizens, advocacy groups, and the Commission. The popular sentiment created around net neutrality was genuine, and citizen engagement with the FCC was an important support for the agency's move toward net neutrality, but it would be a mistake to characterize the Open Internet rules as the result of some sort of internet-facilitated purely people-powered direct democracy or (as should be evident throughout this dissertation) even particularly protective of the public interest. Rather, this section explores how public education and civic engagement campaigns on both sides of the issue shaped popular understanding of and action in the process

of making net neutrality policy at the FCC. Further, I argue, the FCC's broadened *inclusion* of everyday people in the policymaking process did not produce more meaningful popular *participation* nor did it deliver at more than a superficial level the policy measures advocated for by members of the public.

Popular discussion of net neutrality online

Net neutrality is the rare communications policy issue where there is an ongoing conversation that exists outside of the traditional policy sphere. Net neutrality discourse, then, is not just the province of lawyers, economists, activists, pundits, and policymakers, but also everyday citizens. Online social media sites host this popular dialogue, with people sharing news and information and expressing their views on net neutrality on blogs, discussion forums, and an active #NetNeutrality on Twitter. A public has come together around the problem of net neutrality policy and the discussions in these online spaces can be understood as debates over and expressions of public opinion understood in line with public sphere theory, with varying degrees of rational critical deliberation and voicing of popular feeling. These informal popular discussions of regulatory nitty-gritty can also be considered what Kirkpatrick calls "vernacular policymaking" (2013), as they represent social negotiations of the meaning of net neutrality policy that occur outside of the traditional boundaries of the policymaking process.

One of the most prominent sites of popular engagement with net neutrality has been Reddit. A social news site with links and content submitted and ranked by millions of users through a crowdsourced voting process, Reddit hosts particularly active discussions and creative participation among 'redditors.' With a broad and engaged community, Reddit is a touchstone in online culture around the world— it is often referred to elsewhere on the web as simply "the

internet." Reddit is organized around "subreddits" for particular interests, such as politics or technology (in addition to, of course, those consisting mostly of animated GIFs of cats or *Game of Thrones* memes), and net neutrality could frequently be found among the top items across the whole site during the FCC Open Internet proceeding, with many submissions garnering thousands of participants in comments and voting. An investigation of the news, information, and opinions submitted to Reddit about net neutrality reveals an especially salient example of popular online engagement with the issue.

Reddit participants offered each other useful explanations of net neutrality. This included both highly technical explanations of network infrastructure from the site's particularly technology-savvy user base and down-to-earth examples of how the issue is important to people in their everyday lives. A particularly powerful example of net neutrality explanation in concrete real life context on Reddit was a 2009 post with the title "Here's a new scenario I just created illustrating what happens if net neutrality disappears."[3] It is a graphic showing hypothetical internet service offerings from a fictional broadband provider called Telco: directly resembling familiar cable package menus, it shows a broadband subscription rate followed by the additional charges for users to reach various web sites and services such as social media, news, film and television, shopping, gaming, etc. Indicative of the Reddit community's prominent place in online participatory culture and the effective "spreadability" (Jenkins et al. 2013) of the graphic itself, the image circulated across the internet as a way to illustrate the worst case scenario of a world without net neutrality, taken up online in places such as the *Washington Post*, TechCrunch, and Gizmodo.[4]

Figure 4: Fictional internet service packages without net neutrality (Reddit user quink, 2009)

Also among the explanations hosted by Reddit was a form of vernacular theorizing among users on the discourse and political economy of net neutrality. Many discussions took for granted a basic understanding of and support for net neutrality and focused instead on the most effective ways to talk about the issue with others (in the contexts of larger national discourse as well as 'how to explain it your parents').[5] Lamenting the way that the issue was often misrepresented or distorted in mainstream discourse, some even dug into debates about specific discursive formations, such as 'neutrality,' 'open,' and 'freedom.'[6] The battle around net neutrality was

most often framed as a function of monopoly business models of phone and cable companies and a part of pervasive corporate influence in politics. The most pervasive framing of the net neutrality discussion on Reddit was as an expression of outrage toward corporate dominance. This is perhaps best captured by an exchange that took place in a discussion of some Democrats in Congress not supporting net neutrality in which one user throws in the comment, "Comcast is a bunch of fuckheads. Just wanted to say that somewhere in here," to which another replies, "preaching to the choir."[7] A comment from a deleted user account elsewhere in that discussion elaborates on what he or she sees as the relationship between such companies, the government, and citizens: "A Corporate Empire has slowly taken over, American politics is just a dog and pony show, and Americans are too dumb to realize it much less do anything about it."[8] This comment succinctly captures the dynamic of many redditors' position in relation to the politics of net neutrality: against corporate power, but doubtful of public intervention against it; populist in orientation, while disparaging others' capacity for involvement.

Indeed, redditors exhibit a populist sensibility toward net neutrality, as against corporations and in the interest of 'the people,' that comes into tension when confronted with 'people' who do not support it.[9] Reddit discussions were often devoted to refuting anti-net-neutrality arguments, most often those of media pundits or political leaders and rehearsed to fellow supports, but occasionally as actual debate between redditors.[10] One user wrote: "I find it very distressing that even on my Reddit people are still misunderstanding Net Neutrality and swallowing the Republican doublethink of 'don't regulate' as an argument against it. File this under 'basic shit I've explained to my parents many times.' My thanks to those patient enough to clarify such blinkered thinking. We really are in trouble."[11] Another user, in response to the Tea Party perception of net neutrality as interference with free speech, doubled down on demeaning those

opposed to net neutrality to the extent that democracy itself was called into question: "It's comments like these[…] that remind me that democracy is doomed to failure. Even idiots have an opinion and the right to vote."[12] There was a certain elitist discourse among more technically- and politically-savvy redditors expressing the opinion that those who speak out against net neutrality are simply mindless "sheeple" not "qualified to debate" the issue.[13]

Not all redditors were so quick to dismiss the views of grassroots net neutrality opponents, though. This is evident in this comment: responding to one user's comment regarding Fox News viewers that "most really are that stupid ... it's tragic and inescapable," another wrote,

> Not stupid, they're just hearing the wrong things. Americans are smart enough to know that they don't want their internet censored. Unfortunately for those who choose Fox News as their source of news, it's Obama that's doing the censoring. It's mind-searingly frustrating, but if Fox simply had the good conscience not to lie then things would be better. We're supposed to be able to trust our leaders and our media outlets, even though we know they are opinionated, to at the very least tell the truth. I don't think we're dumb, just too trusting.[14]

Captured nicely in this comment is the notion that, rather than seeing net neutrality opponents as dupes who do not 'get it' and thus marginalize their participation in democratic deliberations, we would do better to take seriously the genuinely held sentiments of such people and consider the larger structural conditions within which the issue is defined and how that shapes the way people's values get applied to the case of net neutrality.

Redditors also expressed forms of popular policy activism, in ways that intersected with the media advocacy campaigns of organizations like Free Press and Americans for Prosperity. While much of the engagement with net neutrality was rather one-sided and inwardly focused, there was also a self-reflective recognition that participation on Reddit would be more meaningful if further involved with the official process of policymaking— as one user put it, "Just copy a comment or 2 that you like from this thread and print it and mail it."[15] Some of this

went from tongue-in-cheek ribbing (e.g., “I think we need to show congress this…” “What? Congress doesn’t scan reddit?”) to more pointed critiques of redditors’ commitment to political action (e.g., “Reddit is all slacktivism. Act outraged on the internet, but don't do shit for real.”).[16] Often, though, it sought to motivate activism, even including specific ways to get involved in the policymaking process, such as contacting the FCC and members of Congress.[17]

The users behind these calls to action recognized that among the large number of redditors there was strong support for net neutrality that they sought to mobilize into collective action in the official policy sphere (along with taking for granted the dominance of the educated, Left-leaning, ‘tech geek’ demographic among redditors that also happens to be the dominant identity of net neutrality activists). Among the most important of these mobilizations is something that reflects both this sense of collectivity in political action among redditors and tensions in their populist orientations toward net neutrality: in October 2009, a submission of the link to the FCC’s official website for the Open Internet proceeding was accompanied by a title encouraging redditors to make their voices heard on net neutrality (while presuming what those voices would say), “The republican [sic] spin machine is hard at work trying to stop net neutrality. Almost all the comments on the FCC citizen feedback site is [sic] AGAINST net neutrality… let's fix this!”[18] This brings us to the next matter we must discuss: how people interacted with the FCC in the Open Internet proceeding and *vice versa*, including on the “citizen feedback site” pointed to on Reddit.

Informal citizen interactions with the policymaking process

The FCC made a great show of public engagement in its policymaking proceedings since coming under the administration of Barack Obama in 2009. Obama promised that his presidency would

bring new levels of public transparency and responsiveness from the federal government generally, but the FCC in particular had additional incentives to be inclusive of public involvement in the Open Internet proceeding. To begin with, in recognition of the unusual public attention— and support— garnered by net neutrality compared to other communications policy issues, the FCC saw the Open Internet proceeding as a way to deliver some popular goodwill for itself and a president who promised net neutrality policy as a candidate (not to mention its ability to allay pressure from the newly formidable lobbying of Silicon Valley).[19] When it released its Open Internet rules at the end of 2010, the FCC bragged of the hundreds of thousands of public comments it received in support of net neutrality, even as the rules themselves fell far short of actual net neutrality and disappointed many of those supporters.[20] Further, the FCC seemed to learn a lesson from the fiasco that was its media ownership deregulation proposal in 2003, where it tried to ram through relaxation of media ownership caps and was met with massive public pushback— a campaign orchestrated by Free Press resulted in millions of public comments against the proposal which the Commission could no longer ignore. The lesson learned, though, seemed to be a better way to contain public involvement.

While the FCC made strides toward greater public engagement, it amounted to token *inclusion*, but not meaningful *participation*, in the Open Internet policymaking process. The Commission invited broader contributions, but only on its own terms, which functioned to systematically marginalize citizen voices within the Open Internet policymaking process. The FCC is required to include public comments in the official record that it uses in policy decisions, but that does not mean that the agency has to do anything other than include them— indeed, as we will see below, public comments do not carry much weight with the Commission. People can make their voices heard, but the FCC does not have to listen to them, let alone act on them.

Further, the FCC only includes public comments that are submitted to its own official venues, which excludes the vernacular policy discussions going in spaces such as Reddit. Redditors' sense, noted above, that their participation in the informal popular space of online social media 'did not count' in regard to actual policy decisions was largely correct. The FCC did make efforts to involve more people in the Open Internet proceeding and said it wanted more public participation. However, for the most part the Commission did not go where people were participating; it expected people to bring their participation to the Commission, such as focusing on improving the usability of its electronic comment filing system.[21] Further, even when the FCC did extend to more public spaces, citizen voices took a back seat to elite voices, such as the "public workshops" it held in Boston and Seattle which were largely devoted to "expert testimony" before a citizen audience.[22] We will discuss below the official public comments that the FCC received, but first let us look at two ways in which the FCC did extend to citizens in spaces outside the formal policy sphere that are encouraging but ultimately do not go far enough: the FCC's social media presence and OpenInternet.gov, its "citizen feedback site" referenced on Reddit.

Showing a degree of awareness of the ongoing popular discussion about net neutrality around the web, the FCC took steps to reach out to users though social media services. However, the Commission's social media presence was largely just that: simple outreach, not actual interaction. Beginning with the Obama administration, the FCC started using Twitter (@FCC), Facebook (/FCC), and YouTube (fccdotgovvideo), to post links about its activities, archive videos of meetings and workshops, and occasionally live-tweet coverage of hearings.[23] In official statements, the Commission referred to "Web 2.0" as "a key part" of its "efforts to involve the public in the Open Internet inquiry" and said it uses social media to "increase the opportunities

for more effective public participation in rulemaking."[24] The type of "participation" the FCC envisioned in such statements, however, was "more interchange among commenters."[25] This is consistent with the FCC's social media presence, which offered very little interactivity between commenters and the Commission: user comments on Facebook posts or tweets @FCC on Twitter were sparse and comments on YouTube videos were disabled altogether, while the agency virtually never replied to any user engagements anyway. A telling exception to this lack of interactivity was the agency's use of #oidiscuss as a way for users to tweet to the agency about Open Internet policy, which it used almost exclusively to take questions for 'expert panelists' at public hearings to answer, not to hear users' perspectives themselves.[26] Further, the FCC's characterization of this as public "participation" through social media is a bit of a stretch as none of the comments there counted in the public record for the process anyway.[27]

The FCC did better at including citizen voices in the official pubic record from outside the formal policy sphere in its use of OpenInternet.gov, which represented a step in the right direction but ultimately suffered from some of the same structural inequalities as did more formal spaces of policymaking. OpenInternet.gov was the FCC's web portal for the proceeding, which hosted relevant information, a blog on the topic, live streaming video of meetings and hearings, links to its official commenting system and social media services, and a discussion forum.[28] The site as a whole was a laudable effort by the FCC to open up more avenues for public engagement with its policymaking process. The most interesting experiment undertaken with the site, though, was the social-media-style discussion forum that served as an informal space for user comments to the FCC and that actually counted in the official public record of the Open Internet proceeding.[29] The discussion forum utilized the "idea collaboration platform" IdeaScale, a Reddit-style service that allowed users to submit "ideas" which other users could

comment on and vote up or down, as a way of facilitating and ranking matters for discussion.[30] It is worth noting that IdeaScale, which the Obama administration used across agencies in its "open government" efforts at public engagement, was designed primarily as a customer feedback platform for commercial products and services, which perhaps speaks to the FCC's envisioned relationship between the product of its policymaking and the feedback it sought from the 'customers' who consume it.[31] The Open Internet IdeaScale platform— which garnered over 400 submissions, receiving over 35,000 votes and more than 2000 comments from over 5000 registered users— was not as prominent as other sites where more vernacular discussions of net neutrality took place, but represents a unique case of a hybrid "vernacular web" service (Howard 2008) that served as an informal yet official space of policymaking.[32]

What sorts of comments were submitted to the site, and how did it allow or fail to allow more open and direct engagement with the FCC? Rather than the rationalized technocratic discourse typical of official FCC proceedings, the discussions on IdeaScale were much more populist in tone and in the grounds on which their remarks were based. In particular, many users framed their arguments in terms of the interest of "the people" against large institutions— those in favor of net neutrality saw themselves fighting against corporations, those who opposed net neutrality aimed their objections against the government. The 'structuring other' of corporations or government worked as convenient shorthand in these arguments to invoke the affirmative or negative conceptions of freedom that underlay contrasting understandings of net neutrality. It is not a coincidence that some of the same patterns of discourse seen in Reddit's discussions of net neutrality were evident on IdeaScale, considering the mobilization of redditors, noted above, to "fix" the strong presence of anti-net-neutrality voices there.

Arguments for net neutrality on IdeaScale typically posed the issue as an example of

government intervention to protect "the people" against dominant corporate power. Representative of this populist sentiment in this comment: "Net Neutrality keeps the internet in the people's hands. Something so powerful should not be given up to corporate America. Bottom line. Net Neutrality = good for the people."[33] Many users discussed the internet as a public resource which they feared might come under private corporate control unless the government intervened to protect equal access.[34] One user showed this perspective and separated it from any notion of government control over the internet in a post titled "Net Neutrality = No one telling you what you can and cannot do on the web:" "The only people who would be against net neutral legislation would be those who stand to lose money from it. Don't let anyone tell you this is about the government controlling your internet. This is about companies trying to control your internet. Don't let them."[35] Also common was a defense of affirmative government regulation in the matter, such as in this submission titled "Net Neutrality Can Only Be Ensured Through Government Protection:"

> The Federal Government has historical precedence of intervention when equal access to services is threatened. Vital to a democracy is the protection of the rights of marginalized and smaller groups. This includes the internet. This is not a question of the FCC governing the internet, but rather one of prevent a handful of corporations from access to it [sic]. Net neutrality ensures that every site has an equal voice and that every user has uninhibited access to the internet. Anything less is tantamount to censorship. A handful of ISPs form an oligopoly on internet service. This cannot be allowed because the internet is principal means of communication.[36]

The submission voted to the top of the whole discussion— titled "Stand with the Public. Pass a Strong Network Neutrality Rule"— was actually a meta-comment on public participation in the Open Internet proceeding, basing its argument purely on populist support for net neutrality and against corporate power: "The public demands the strongest Network Neutrality rule possible, without loopholes. Millions of Americans have called for nothing less, and now the

FCC must act decisively, putting the public interest first and not giving in to pressure from AT&T, Comcast, Verizon and their lobbyists." We will see below why this user in particular presumed to speak on behalf of "the public" and drew attention to the large numbers of net neutrality supporters.

Arguments against net neutrality on IdeaScale— of which there were more than in unofficial policymaking spaces like Reddit— almost uniformly framed their opposition in terms of "the people" standing against the government. Opponents were dubious of the populist claims made for net neutrality— for instance, one user even directly called into doubt the top post, writing "The Public? What a Joke!"[37] Representative of this perspective is this post titled "Government takeover of the Internet," where the user writes, "Those who are supporting 'Open Internet' are either supporting government takeover or are uninformed of what rights they will be loosing [sic] should the government takeover the internet. It is obvious the left want to stiffle [sic] free speech and opposition to their Socialist agenda!"[38] Also typical of the anti-government sentiment of such comments was an emphasis on a negative conception of free speech, seen clearly in this submission titled "Leave my free speech alone:" "The government needs to stay out of the internet & let us have our freedom of speech. They are trying to get into our business any way possible."[39] Freedom of speech was employed as a general principle to make many arguments on all sides— it was the category to which posts were most frequently submitted.[40]

Comments on IdeaScale tended to remain at the level of general principles such as freedom rather than specific proposals, dividing along different interpretations of public values. Those against net neutrality were suspicious of public values, such as one user who wrote in a post titled "Government should stick to the constitution, leave biz alone!" that "This 'net neutrality' crap is just one of the many angles from which the liberals/democrats are attacking

freedom of speech. They are trying to use 'diversity,' and 'fairness' as the labels for some of their other attacks on the 1st amendment. Don't let you [sic] government muzzle you like Hugo Chavez or the Soviets."[41] Most opposed stuck to the simple value expressed by in this post: "Smaller Government, is better."[42] Meanwhile, arguments in favor of net neutrality positively invoked public values and government protection of public resources in comments such as "The Internet is A Global Commons. Protect Our Last Free Space." and "Private Companies Have Stolen Public Property."[43] That these comments were users' expressions of general principles and values, and not actually specific 'ideas' or plans, meant that they played into the process in ways that required a certain amount of translation in order to be meaningful contributions in the FCC's eyes. Some users recognized this, such as the user who wrote, "Obviously we need to come up with a detailed technical language in order for this law to be effective, but the fundamental point remains that neutrality is crucial to the betterment of our access to information."[44] Such "detailed technical language" definitely flies better in official policy circles, as discussed below. This raises the issue of how "fundamental point[s]" such as the one posed above are translated and represented to policymakers in more official capacities.

While online services like IdeaScale did allow more open involvement for everyday people, they do not necessarily result in more direct or unfiltered interactions between citizens and the FCC— especially as much of the discourse that existed there, even though populist in nature, was shaped and channeled by institutionalized media advocacy campaigns on both sides of the net neutrality issue. Specifically, much of the pro-net-neutrality, anti-corporate rhetoric followed the lines drawn by Free Press, while the anti-net-neutrality, anti-government rhetoric largely came from Americans for Prosperity. In fact, the two submissions voted to the top on IdeaScale originated from leaders in these two groups.

The top post on IdeaScale mentioned above— titled "Stand with the Public. Pass a Strong Network Neutrality Rule" which framed the pro-net neutrality position in terms of a need for rules, without loopholes, to protect the public interest against corporate power— was submitted by the user tkarr, net neutrality campaign director at Free Press.[45] Free Press is a media advocacy group working for progressive media reform, founded by communication scholar Robert McChesney and other Left-leaning activists. Karr's role within Free Press was coordinating the Save the Internet campaign, through which Free Press organized a coalition of hundreds of advocacy groups and millions of citizens to push for net neutrality policy, as discussed in Chapter 2. Unsurprisingly, Karr's post mirrors the messaging from Free Press that emphasized "real net neutrality" in the public interest: Free Press consistently explained to its supporters that the FCC's Open Internet proposal was "fake net neutrality" and drew attention to the loopholes that weakened the rules (which will be discussed in Chapter 5), and pointed them to the FCC proceedings to show support for stronger rules.[46] Many of the other submissions on IdeaScale reflected the influence of Free Press on the popular discourse of net neutrality in policymaking circles, as the patterns of discourse such as 'public interest over corporate power' noted in the comments above parallel the way the issue was framed in progressive political publications that share connections with Free Press. These include editorials from Free Press's co-founders John Nichols and Josh Silver in progressive publications such as *The Nation* and the Huffington Post.[47]

This Free Press IdeaScale post is a product of the group's larger public education and popular mobilization strategy. The group worked to draw attention to the issue of net neutrality, explain it to people the way they wanted it understood (as a matter of necessary and strong government regulation, which was not an unanimous position among net neutrality supporters, as

can be seen in Free Press's clash with the EFF), activate those people to speak out on it, and then use those citizen voices to legitimate their own position. Indeed, the information and organizing efforts of the Save the Internet campaign represent the outreach branch of Free Press's two-pronged strategy, complemented by its inside game of lobbying policymakers and submitting official briefs: due to the former, Free Press presumed to speak on behalf of "the public" within the latter. The next section looks closely at how this strategy played out within the official public comments submitted to the FCC, but first a similar dynamic that can be seen on the other side of the issue must be considered.

The second most highly voted post on IdeaScale, titled "Real Internet Freedom, Not Regulation," came from Americans for Prosperity. The text of the submission— which argues that net neutrality supporters are overreaching in an attempt to institute government control of the internet— almost exactly matches that of several other posts on IdeaScale and in official public comments (save for the occasional flair thrown in by individual users, such as one user's addition of, "Leave the internet alone, you socialist dogs… My apologies to real dogs, everywhere."). Most of these posts opened with the phrase "As an Americans for Prosperity activist…"[48] Americans for Prosperity (AFP) is a political advocacy group founded by David and Charles Koch, the billionaire brothers who own Koch Industries, that pushes a Right-wing libertarian agenda across several issue areas including technology policy; it is also associated with the Tea Party movement. The second-place post was submitted by user pgk, which happen to be the initials of Phil G. Kerpen, vice president of policy at AFP at that time and chairman of the Internet Freedom Coalition, an umbrella group of Right-wing advocacy groups and think tanks.[49] The submission is steeped in the policy jargon of competitiveness, efficiency, and investment more typical of official legal proceedings than informal online discussions, yet it also

stokes populist fears of "government control" and "government ownership," suggesting an awkward attempt at a Free-Press-style insider/outsider strategy from the opposite side.[50]

The support for such anti-net-neutrality posts on IdeaScale, as well as the large quantity of other posts along those lines, did demonstrate the ability of AFP to shape people's understanding of the issue: AFP's 'government takeover of the internet' discourse from the comments cited above showed up in conservative media sources and provided the set of talking points these users deployed. Fox News host Glenn Beck brought the 'government takeover' discourse of net neutrality to his television program courtesy of Americans for Prosperity, pointing his viewers to the group's NoInternetTakeover.com website through which to submit comments to the FCC. Beck even thanked Kerpen by name on air for "alerting" him to the issue.[51] An interesting dynamic was evident in the fact that AFP took on Free Press directly, which was a focus of Beck's and in turn could be seen in the comments from AFP supporters to the FCC: characterizing Free Press as a "special interest" that did not represent the people's interests and even implying that its popular support was not genuine, Beck specifically attacked Free Press founder McChesney as a "Marxist." Taking comments that McChesney made to a Left-wing publication out of context, about the possibility of instituting socialist economic principles in the US, Beck asserted that "Free Press isn't about free speech. It's about Marxism. It's about silencing dissent."[52] This was echoed in AFP supporters' comments to the FCC, all the way down to invoking McChesney as a Marxist bogeyman.[53] Through attacks such as Beck's, AFP helped create a sensationalist misrepresentation of the issue to those on the libertarian Right, since net neutrality regulation clearly involves no government censorship of internet content or speech, nor any dominance over infrastructure— indeed, net neutrality policy seeks to eliminate censorship and concentration of power over infrastructure. This fear-mongering discourse

exploited the genuine misgivings that many citizens have about government power to provoke people into action toward corporate free speech at the expense of their own free speech.

Both Free Press and Americans for Prosperity worked to drum up and then channel populist sentiments toward net neutrality policy, by structuring the ways in which people understood (and misunderstood) the issue and then speaking on behalf of those people to the FCC. Much the way that citizen discourse gets "translated" into official discourse by advocacy groups in Gangadharan's "deliberative standard" (2013), popular voices became public opinion to the FCC once delineated by insiders. In this way, citizen inclusion in media policymaking at the FCC does not represent a form of direct participation, but works on a representative model: advocacy groups mediate between the official policy sphere and the people, relating to citizens an interpretation of the issue as meaningful to them on the one hand and relaying to policymakers those citizens' views on the issue on the other hand. This representative "deliberative" model is a pragmatic way to mitigate problems that lead to a lack of citizen involvement in the policymaking process, but it in this case it had its own problems, too. It leaves advocacy groups in an important position of power over the representation of the policy to citizens and of the citizens to the policymakers, though, which, as the case of Americans for Prosperity demonstrates, is one ripe for distortion and manipulation. It also leaves the FCC with a reified form of public participation— a form of what Freedman calls "media policy fetishism" (2014)— which it can point to as being included while dismissing it when convenient. We can see this in official public comments submitted to the FCC.

Public comments and the official policymaking process

The official public comments that the FCC received in the Open Internet proposal fit the patterns

of discourse evident in the more informal and/or unofficial spaces of policy discussion. The FCC is required by the Administrative Procedure Act (APA) to accept comments on policy proposals from any interested person or group and these comments must be made part of the official record of evidence that the Commission considers when it makes its final decision on the policy.[54] It is clear upon inspection that the public comment record for the Open Internet proceeding was dominated by Free Press supporters whose comments were filed with the FCC by clicking through an automated submission setup. Many of these comments showed significant correlation with the Free Press post on IdeaScale discussed above, calling on the FCC to "stand with us" and "protect Net Neutrality by enacting strong rules."[55] This populist, pro-net-neutrality sentiment underpinned Free Press's call for stronger nondiscrimination protections and closed loopholes within its own briefs and comments in its initial push when the proposal was released.

Later, following the *Comcast* decision detailed in Chapter 3, Free Press's focus shifted to reclassification of broadband as a telecommunications service. In addition to petitions signed by nearly two million citizens hand delivered by Free Press staffers to the FCC offices in Washington which supported the same position, the group facilitated the filing of tens of thousands of comments arguing that "real net neutrality" could only come through reclassification.[56] This message had to be carefully crafted, balancing the need to relay grassroots 'demands of the people' with putting the wonky words of Title II of the Communications Act in those people's mouths. The thousands of comments submitted through Free Press that focused on reclassification spoke in the first person in opposition to corporate control and connected personal experience to a call for reclassification:

> I rely on the Internet as a public platform for free speech, equal opportunity, economic growth and innovation. Without vital Net Neutrality protections, companies like Verizon and Comcast[…] can decide whether I will have a voice online. These companies should not have the power to determine my fate on the Internet[…] The agency must stand with

> the public and protect consumer access to the most important communications medium of our time. Please reclassify broadband as a "telecommunications service" and keep the Internet open and free of corporate gatekeepers.[57]

While emphasizing the public resource that internet infrastructure would be under a Title II common carriage model, the public comments that Free Press facilitated carefully avoided the controversial terminology of 'public utility,' which became a lightning rod for opposition groups like Americans for Prosperity.

Americans for Prosperity used a similar tactic in getting its supporters to submit public comments *en masse*, for its part crafting language pitting grassroots support for a "free-market Internet" against government control through a "public utility" model. Some AFP comments followed the same text as the IdeaScale post, which fit the norms of official policy comments a bit better than that of informal online discussion forums— it even cited a specific paragraph of the Open Internet proposal and called out a particular letter submitted to the FCC— yet still struck the balance between outsider populism and insider lingo in an awkward manner noted above.[58] AFP specifically took aim at the "public utility" model of internet regulation, again conjuring frightful imagery of government control of the internet by equating common carriage with socialism and invoking the names of McChesney and even Susan Crawford in her short-lived capacity as White House advisor on broadband issues.[59] Another set of public comments written by AFP picked a fight with Free Press over who really speaks for 'the people:'

> The Internet is a remarkable free market success story, and the vast majority of Internet users are NOT clamoring for regulation. Self-styled consumer groups asking for regulation actually represent an extreme left-wing ideology that is hostile to free-market capitalism and puts its trust in government. That is not the position of the 'grassroots' or most American Internet users. I urge you to reject new regulations and allow the free-market Internet to continue flourishing.[60]

In many ways, AFP's job in riling up and channeling opposition to net neutrality was easier than

Free Press's on the other side, as reductive conceptions of the "free market" and "regulation" translate more easily to popular discourse than does the jargon of "reclassification," yet it was not able to match Free Press in terms of numbers of commenters.

The strategy of driving public comments to the FCC behind the group's position is a double-edged sword: a large number of comments may shift the structure of feeling around the issue for policymakers, but are unlikely to serve as actual support in the policy decision. When groups like Free Press and Americans for Prosperity dump thousands of comments with citizens' names on them on the FCC, they seek, as much as anything, to take the FCC's invitation to public participation as a way to overwhelm the proceeding in a way that cannot be ignored. But when the Commission receives a massive wave of comments featuring little other than boilerplate talking points from a given side, the strategy can actually backfire and make citizen voices easier to ignore. This dynamic has become clear since Free Press began mass filing of duplicate public comments around the media ownership issue: off the record, FCC staffers admit that canned public response is largely disregarded or taken as just the singular "biased" voice of that particular interest group (see Freedman 2008: 80-104).

Even though the FCC must accept and consider public voices, media policymaking is not exactly a democratic process. It is not in an electoral sense where public comments equate to votes and advocacy groups seek to 'get out the vote.' Neither is it a representative process where regulators act on citizens' behalf. The public comment record is not a tally of the numbers for or against or the voice of its constituents, but a body of evidence that the Commission draws from in order to justify the decision it alone ultimately chooses to make. These decisions are covered with a sheen of technocratic expertise that removes a degree of accountability from citizens framed as not fully understanding the situation. For instance, one FCC staffer insists that the

Open Internet rules ultimately delivered were in the public interest whether the public knew it or not, because the protections they offered are the best that was possible in the process.[61] Nonetheless, advocacy groups continue the strategy (with additional encouragement to add to or modify the boilerplate text for a higher degree of personalization) as an attempt to change the general sense of the issue in the policy sphere, perhaps just to expose policymakers to people other than the lobbyists and lawyers they spend most of their time around and remind them of the existence of people to whom they ought to be accountable.

Even beyond the duplicate comments filed *en masse* through advocacy groups, citizen voices are further marginalized in the FCC public comment record through discursive inequalities in the policy sphere. The FCC calls public comments "very helpful to our decisions" and says that they "play an important part in Commission decisions because they tell us what people think about our proposals and why they support or oppose them."[62] There are some comments that the FCC considers more "helpful" than others, however: following the APA, the FCC's decision-making must be based in a "reasonable" record of evidence, so the FCC emphasizes a formal rationalized discourse that is the norm in the official policy sphere.[63] In providing suggestions on how to "prepare effective comments," the FCC recommends providing "supporting evidence or data[…] to support your views" and encourages commenters to "challenge [the Commission's] and other commenters' factual assumptions; applications of data and research; analytical methodologies; analysis; or factual, technical, and policy conclusions".[64] The Commission evaluates how and whether to incorporate comments into its decisions and it clearly favors classical argumentation and reasoning that privileges the elite discourse of the lawyers and economists the agency is used to hearing from, at the expense of those without ready access to that discourse. Indeed, without "data to support your submission," the FCC "cannot

rely on it since we are required to provide the basis for [its] final decisions."[65] The rationalized discourse of econometrics and legal jargon dominates the policymaking process, delegitimizing public comments based in populist sentiment and personal opinion rather than properly quantified "data" or apolitical discursive positioning. This is why Streeter refers to the Washington Beltway as an "interpretive community" (1996). Even though, as mentioned above, the FCC pointed gleefully toward the great number of public comments included in its record, the text of the Open Internet Order itself does not cite a single citizen comment as evidence, although several advocacy groups are referenced as speaking on behalf of the public interest by the Commission.[66]

The mediating role of advocacy groups for citizens can become strained at the point where the values and principles operating within the policymaking process end up obscured through arcane procedural minutia. On the surface, the FCC's Open Internet proposal set forth a policy protecting net neutrality, but the rules were so weak as to barely qualify as net neutrality and were based in a regulatory framework that rejected the common carriage tradition. For this reason, it was not enough for people to voice their support for a free and open internet in a general sense— a certain degree of technical and legal understanding was necessary to see that, regardless of FCC rhetoric, the Open Internet rules did not go far enough toward actually protecting the open internet. Especially in the wake of the *Comcast* decision when the battleground shifted to the definition of broadband itself, as detailed in Chapter 3, Free Press made a pivot in its public engagement efforts from slogans like "real net neutrality" into education and mobilization efforts surrounding the specific regulatory details of FCC classifications. With Free Press egging it on, "reclassification" became the unlikely rallying cry of concerned citizens, even showing up in online discussions like those on Reddit and in

hundreds of thousands of demands issued to the FCC.[67] Even as it acknowledged that it was shifting the public debate onto the rarefied turf of insider legal lingo, Free Press pressed on for reclassification as its primary strategy at both the grassroots and insider levels. The Save the Internet coalition addressed FCC Chairman Julius Genachowski on behalf of citizens in an open letter it called "Just Do It, Julius," saying, "Nearly 250,000 people have urg[ed] you to protect the Internet by 'reclassifying' broadband under Title II of the Communications Act. And yes, we know what 'reclassify' means. But does the FCC know what it means when this many people are speaking out about an incredibly nuanced, seemingly wonky issues [sic]? Let me tell you: It means that we care, deeply, about the future of the Internet."[68] It would be easy to dismiss the importance of the technicalities of media policymaking if it were not that so much of the outcome depends on them: a citizen may not need to understand technical jargon to demand net neutrality in principle, but she does need to know how to frame an effective call for net neutrality and to understand whether she's actually getting it or not in policy.

Ultimately, the FCC took the outpouring of popular support for open internet principles as support for its Open Internet policy, a discursive framing that served to push the question of reclassification out of bounds and to legitimize the corporate negotiations noted below that successfully delivered a watered-down policy. Policymakers tend to genuinely believe that what they are doing is in the best interest of the people and the sense around the Open Internet proceeding at the FCC was that the Commission did the best it could within what was possible.[69] This understanding of what is possible and what is best, however, is limited by the dominant discourses within which the policymakers operate, which indicates the importance of shifting the discourse at that level to achieve change. Public participation is crucial in this regard, as gaining ground for more democratic structures will take a large-scale popular push, not just against bad

policy, but also affirmatively for better policy. To be effective, this must happen at the level not just of principle, but also of policy— the assumption that people will not pay attention to the 'boring stuff' must be proven wrong, so that policymakers can be held publicly accountable to deliver that which their rhetoric claims they seek. Mediating between citizens and policymakers through education on policy matters and encouraging representation in policy processes is an important role that advocacy groups play in the process— one that comes with an ethical responsibility to not cynically exploit that role.

Broadband providers, media access advocacy, and communities of color

In this section I will explicate some of the dynamics and implications of discursive power relations in this policymaking process, with particular focus on two groups not historically strongly allied when it comes to media policy discourse: the telecommunications industry, and groups representing African-American and Latino/a communities. While scholars such as Chon Noriega (2007), Mary Beltrán (et al. 2005), and, as discussed further below, John McMurria (2011) have looked at the discursive power relations between media industries and civil rights groups, this remains an underexplored topic in cultural studies and media policy studies alike. This is especially true involving the telecom industry in particular and from a discursive approach, which is what this section does. Of particular interest here are the prominent civil rights groups who have come out in opposition to net neutrality because of their view that universal broadband internet access and net neutrality are fundamentally opposed. I will discuss how this understanding has been influenced by the dominant discourse put forth by phone and cable corporations in the policy arena: that strong nondiscrimination regulations on internet access will stifle the network investment necessary to increase the availability and affordability

of broadband. Rather than being duped or bought off, as other advocates have argued, civil rights advocacy groups were hailed to this dominant discourse in opposition to net neutrality. I argue that these groups were presented with a false choice between a universal network and an open network— either inclusion online *or* participation online— and, thus, their work in the policymaking process was channeled toward the policy position that served the powerful corporate interests involved.

In 2009, the FCC was given a new congressional mandate to "to ensure every American has 'access to broadband capability.'"[70] The FCC, then, was tasked with making broadband internet available, accessible, and affordable to every US citizen. The National Broadband Plan was the FCC's strategy to achieve digital inclusion and to work against the digital network equivalent of 'redlining' as it had been experienced as cable television rolled out.

Before getting into some of the details of the Broadband Plan, it is worth briefly noting some of the implications of this development for media policy regimes regulating access to networks. Importantly, promoting universal access suggests a move from treating broadband as a commodity to treating it more like a utility. In capitalist economies, access to commodities is determined by the market, with availability and price based upon supply and demand. Commodities are viewed as elective and therefore it is appropriate for the terms and conditions of access to be set by producers— this is, for instance, what we see with access to multichannel cable television networks. Access to utilities, however, is regulated by the state. Utilities are viewed as entitlements necessary for basic social inclusion and therefore more subject to government intervention to ensure universal access, maintenance, and improvement— this, for instance, is what we see with access to the networks of electricity and telephone service. The central point here is that with the mandate for universal access contained in the National

Broadband Plan, Congress initiated a regulatory shift in the treatment of broadband internet access from a typical commercial good to a 'public good,' any private providers of which are typically held to public obligations.

The most prominent public good regulation by the FCC is what is known in policy circles as 'plain old telephone service' (POTS). From its beginnings in the Communications Act of 1934, the FCC was charged with providing universal telephone service, which when revised in the Telecommunications Act of 1996, explicitly prohibits discrimination in access based on race, among other factors. In 1997, in response to another new provision of the 1996 Act, the FCC created the Universal Service Fund (USF). This fund was made up of required contributions from phone companies to the Universal Service Administration Company that distributes them on behalf of the FCC to help ensure inclusive telecommunications accessibility. The primary focus of the USF was two programs designed to encourage the availability and affordability of telephone service. The first was the High Cost program, which was meant to subsidize building and operating affordable telephone service in rural areas and other locations that otherwise are too expensive for telecommunications providers to service. The second consisted of two Low Income programs, Lifeline and Link-Up, which directed subsidies for basic local telephone service to subscribers who could otherwise not afford it, no matter where they were located.

The release of the National Broadband Plan in 2009 saw the FCC take on broadband internet as a new public good to regulate. The Broadband Plan summarized the current situation in regard to broadband internet in the US and provided the FCC's strategy for "achieving affordability and maximizing use of broadband."[71] One of the central proposals of the Broadband Plan was to reclassify the USF to provide for universal broadband service.

The FCC made good on this proposal to reform the USF and began the transition to regulating broadband internet access as a universal service. In 2011, the FCC created the Connect America Fund out of USF monies previously allocated for voice service, re-allocating them to go toward broadband internet service subsidies. Besides shifting the High Cost program into incentivizing broadband network deployment, in 2012 the FCC transitioned the Lifeline program toward subsidizing the costs of broadband access for low-income populations— an initiative especially helpful to inner-city African-American and Latino/a populations that are less likely to be able to afford the often more expensive subscription rates of urban broadband providers. The FCC in 2012 also began the Mobility Fund that targets funding to support next-generation mobile broadband networks. This is an important development, as mobile broadband is well on its way to being the primary means of internet access in the near future, but it is especially relevant to African-American and Latino/a populations who have been shown to be heavier users of mobile phones than other groups and more likely to use mobile devices as their primary means to access the internet.[72]

Civil rights groups have strongly supported regulating broadband internet access as a universal service, consistent with their ongoing efforts to "close the digital divide" for communities of color, and have strongly encouraged the FCC to make broadband access, affordability, and quality the commission's top priority. For instance, the Leadership Conference on Civil and Human Rights (LULAC), a civil rights umbrella group that includes the prominent African-American and Latino/a advocacy organizations the NAACP and the National Council of La Raza, respectively, supported reclassifying the USF to include broadband, especially to expand the Low Income programs to be used to address broadband affordability issues.[73] Broadband internet access service providers were also largely in favor of reforming the USF—

the three largest broadband providers, Comcast, AT&T, and Verizon— all called for the inclusion of broadband as a universal service.[74] Internet access providers such as these, of course, stand to benefit greatly from these government subsidies for the expansion and upgrade of their broadband networks. In fact, AT&T and Verizon are the two largest recipients of USF subsidies, both receiving well over $1 billion a year, despite the fact that both corporations bring in yearly revenues in the tens of billions of dollars and their voice networks are nearly fully deployed.[75] Further, while phone companies like AT&T and Verizon are used to receiving these subsidies, cable companies like Comcast are eager to get in on such funds. As we have discussed, net neutrality, as a principle of openness and nondiscrimination, is linked to common carriage, the basic nondiscrimination principle that has for centuries been used to regulate privately owned networks that serve as 'public goods.'

People of color, as those who have historically been most discriminated against, are certainly some of those who stand to gain the most from a nondiscriminatory network. By the affordances and design of the technological system itself, the internet is decentralized and nonhierarchical, so that anyone with access to the network and the necessary skills can culturally express themselves, communicate socially across an online community, technologically innovate, or organize a political movement without having to ask permission or secure a great deal of funding. Phone and cable companies, though, would like to use their position as owners and operators of the pipes on which internet content and services flow to become just the sort of gatekeepers that the internet has never had. We will see how their model of the internet is one made up of a "public internet" with the freedom and openness that we have now and a separate network of premium "specialized services" made up of their own content and services or that of providers who pay them extra for distribution. This, of course, is a move toward the inequitable

media structures that exist in old media industries like broadcasting, as these "specialized services" would be the content and services from the big corporate media producers and many marginalized people of color would be unable to afford the extra charges to access this privatized 'top-tier' internet, let alone afford such priority distribution for their content.

The National Broadband Plan demonstrates that some momentum is shifting at the FCC toward regulating broadband more like a utility. Treatment as a public good has historically brought with it necessary regulations not just for universal access but common carriage, as well, so as to ensure equality in both access and use. The Broadband Plan puts it that, "Broadband networks only create value to consumers and businesses when they are used in conjunction with broadband-capable devices to deliver useful applications and content. To fulfill Congress's mandate, the plan seeks to ensure that the entire broadband ecosystem— networks, devices, content and applications— is healthy."[76] The Broadband Plan, in this reference to the FCC's Open Internet proceedings, calls for net neutrality regulations. While the telecommunications industry is largely in support of universal access policy like that in the Broadband Plan, they have fought very hard against common carriage policy like net neutrality. That is, they want the money, but not the rules that go with it.

In this way, seeing an incompatibility between these two policy proposals— universal broadband service and net neutrality— might make sense from the perspective of the telecommunications industry. However, what is less immediately clear is why this same position— for universal broadband and against net neutrality— is held by the most prominent civil rights groups. Let us turn now to examining this further.

Communities of color choosing between inclusion or participation?

Looking through the various filings in and media coverage around the FCC proceedings on the universal broadband and net neutrality issues, we can begin to arrive at a better understanding of the perspectives and positions of the civil rights advocacy groups involved. Prominent civil rights organizations like the NAACP, LULAC, and the Rainbow/PUSH coalition, as well as the media advocacy group the Minority Media and Telecommunications Council (MMTC) and policymakers of color such as the members of the Congressional Black Caucus (CBC), have all advocated for universal broadband and against net neutrality. Despite the conspicuous standing of these high profile civil rights advocates, communities of color are not united against net neutrality policy. On the contrary, many other civil rights advocacy groups like Color of Change, UNITY: Journalists of Color, Latinos for Internet Freedom, the Center for Media Justice, and Media Action Grassroots Network (MAG-Net, an alliance of more than three hundred local civil rights groups) support both universal broadband and net neutrality policies.

Two differences between these two sets of groups are evident. The first is that those in the pro-neutrality camp are (with the exception of the MMTC) groups with a focus more specifically on media issues facing communities of color. This focus may suggest a more complete understanding of the details of net neutrality issue in their full complexity. The second is that those against net neutrality are the more 'officially recognized' civil rights groups, while those in support of net neutrality are more grassroots organizations. The more established, top-down organizations operate largely 'inside the beltway' in Washington and typically serve as 'the minority voice' in media coverage. While groups like the NAACP, the CBC, and the MMTC serve as the primary representatives of people of color in the policy sphere and the mass-mediated public sphere, it is certainly questionable if they can be said to completely represent the

views and interests of communities of color in comparison to the more bottom-up 'outsider' groups like Color of Change and MAG-Net.

Tensions between those on the two sides of the net neutrality issue have surfaced within communities of color just as they have within the progressive community, and have been played out similarly in the policy sphere, the public sphere, and the blogosphere. The 'insider' civil rights groups have fought against net neutrality policy within policymaking circles, through various filings, testimony, and lobbying, but in public have stated a support for net neutrality in principle— they say they are merely questioning if binding regulatory policy is the best way to achieve it. Comments in the Open Internet proceedings filed by the MMTC read:

> If drafted or applied incorrectly, net neutrality rules could increase the price of broadband for minorities, reduce broadband adoption, deter the investments necessary to fully bridge the digital divide, limit job growth and economic opportunity, and harm the interests of minorities in other significant ways. If not carefully drafted, net neutrality rules could have the unintended effect of locking current disparities in place for years to come, thereby consigning minorities to a permanent digital underclass.[77]

This stance of support for net neutrality principles but against net neutrality policy, as well as the discourse of the potential 'unintended consequences' of such policy, is replicated exactly by the telecommunications industry, which says that they will self-regulate to ensure openness and nondiscrimination and that any government regulation will only deter network investment and innovation, so binding policy is unnecessary and actually harmful. This line of argument was criticized by civil rights media advocates like Color of Change, which argued that by "asking questions we should not be afraid to answer" about net neutrality policy, the MMTC and others are "push polling" net neutrality— altering the frame of the debate by obliquely implying the completely unproven idea that net neutrality rules could widen the digital divide.[78]

Anti-net-neutrality civil rights advocacy groups came under heavy fire from many pro-neutrality civil rights advocates. Many of these critiques draw out connections between groups

like the NAACP, LULAC, the MMTC, and the CBC to the telecommunications industry, accusing them of "selling out" the interests of communities of color to corporate interests. Many of the members of the Congressional Black Caucus who have pressured the FCC to either abandon or ease up on their proposed net neutrality rules are regular recipients of campaign contributions from phone and cable companies. These legislators have admitted that their understanding of this complex issue is almost entirely informed by industry lobbyists' explanations.[79]

Many civil rights groups have long-standing financial relationships with the media industries.[80] In this particular case, NAACP, LULAC, and the MMTC also have financial relationships with phone and cable companies— each receives millions of dollars every year in donations and in-kind services from AT&T, Verizon, and Comcast that go toward community technology infrastructure projects and various education and training programs.[81] When the acceptance of this money was pointed out, such civil rights advocacy groups have been accused of being, at least, co-opted by corporate interests and, at most, becoming 'astroturf groups' (organizations with the appearance of grassroots, but which serve corporate agendas). While there are some organizations operating inside the beltway fighting against net neutrality that could serve as textbook definitions for astroturf groups— the Alliance for Digital Equality and Broadband for Everyone are essentially front groups for the telecommunications industry, with most of their agendas, budgets, and members of their advisory boards coming from the industry[82]— calling groups like the NAACP, LULAC, and the MMTC astroturf is much too strong. There is undoubtedly some influence that comes from accepting corporate donations of the scale that they do, but these organizations are also far from toeing any industry line and have a long history of admirable work on behalf of communities of color.

Contentious exchanges have developed around not only accusations of directly selling out but also of being uninformed. Some progressive media reform organizations like Free Press and Public Knowledge implied that the anti-neutrality 'minority groups' do not fully grasp the issue because they have 'fallen for' the industry rhetoric. Responses from the NAACP, among others, pointed to the power dynamics of predominantly white members of these 'public interest' organizations ostensibly 'speaking for' communities of color as troubling and the insinuation that civil rights groups 'don't get it' or have been 'duped' by the telecommunications industry as insulting to communities of color.[83] These racial tensions among advocates on the Left are recounted and discussed by McMurria (2011) in his analysis of different approaches to the issue of media ownership. McMurria rightly critiques the racialized implications of these dynamics between those whom he identifies as part of the anti-corporate and commons strains of media advocacy (including Free Press, Public Knowledge, and their public intellectual supporters, McChesney and Lessig) with civil rights groups. McMurria draws out the principle behind the stance of the MMTC— that net neutrality is not enough on its own to change the larger structural racism of media ownership. In doing this, however, McMurria cherry-picks tactically simplified public statements from McChesney and Lessig that unfairly represent them and advocates aligned with them as somehow unaware of or unconcerned by racial issues in media industries, in spite of much other work to the contrary.

Some civil rights advocates presented net neutrality as perhaps beside the point for communities of color. African-American media consultant Navarrow Wright has insisted that in order to accomplish the goal of closing the digital divide, contentious issues like net neutrality should be left aside— "the politics of broadband," as he put it, "should be checked at the door."[84] Wright and others have presented net neutrality as "rules to protect wealthy, high-tech users" and

an issue only for the "digital elites" who do not have to worry about the basic issues of access and affordability that people of color do.[85] David Honig, the head of the MMTC, similarly referred to net neutrality as a "costly detour" that is distracting from the important issues of universal broadband access.[86]

In this discourse from anti-net-neutrality civil rights advocates, the issues of the digital divide and net neutrality were shown not only as not related to one another but also were often presented as actively opposed to one another. For instance, a number of members of the Congressional Black Caucus said that they are not supporting net neutrality policy not because they are against net neutrality, but because their primary issue is universal broadband service.[87] A position such as this on broadband access issues betrays the confounding logic that these two issues are inherently adversarial, so that in order to close the digital divide we must leave behind net neutrality policy— that ensuring access for all means sacrificing participation for many.

This false choice between universal broadband and net neutrality can be traced to discourse from the telecommunications industry. Corporations like AT&T, Verizon, and Comcast have essentially said that net neutrality would harm broadband availability, quality, and affordability in communities of color.[88] Broadband providers say, first, that the best way for them to expand and improve their networks is with the kind of extra revenue that could be generated from exclusive content and service deals with a tiered private internet scheme. Further, they say that net neutrality regulations would "deter investment and innovation" by preventing such an arrangement and, therefore, the costs of such investment in their networks would have to be passed along to consumers.

There are several problems with such an argument. First of all, the claim that substantially more revenues are needed for the expansion and improvement of broadband

networks seems dubious in light of the profit margins already enjoyed by the big phone and cable companies (e.g., Comcast earns 80% profit margins on its broadband services[89]) and the millions of dollars in government subsidies these companies stand to take in under the National Broadband Plan. Second, only a cursory knowledge of the history and economics of the telecommunications industry provides no support for the notion that these corporations will invest in marginalized communities of color once even higher profits are taken in: decisions such as these are made on a simple basis of 'return on investment' and communities of color have consistently been judged by these corporations as not a worthwhile investment.

When faced with a choice of neutral access or no access at all, it is understandable to find the latter more in the interests of communities of color than the former. But why do so many civil rights advocates accept this understanding of the issue in the first place? The answer is not a simple one of being bought off or duped by phone and cable corporations, but is rather about positions in relation to power and discursive construction.

The telecommunications corporations have the power of "the definition of the situation" here. People of color, then, are being hailed as consumers and not producers and asked to compromise full participation for basic social inclusion. This subject position, described by Scott Wible (2004) as the "citizen-consumer," has been naturalized in media culture and taking it up here means that access to the cultural expressions of others is seen as the best that can be hoped for. Steve Classen (2004) shows the long history of "consumer rights" discourse in the civil rights movement, especially as it has been directed at the FCC in effective but ultimately constraining ways. Sacrificing net neutrality for universal broadband means shaping the emergent participatory affordances of internet technologies into familiar media structures that have historically left communities of color on the outside looking in.

Looking again at the positions in relation to power of civil rights advocacy groups that take stances against net neutrality can help us understand the dynamics at work here. The more 'officially recognized' groups like the NAACP, LULAC, and the MMTC operate 'inside the beltway' and they generally have a place (however sidelined) at the policymaking table. While these groups are genuinely looking out for the interests of communities of color, by taking up this subject position these groups have already accepted, to at least a certain extent, the discourses that channel power in this policy sphere and this puts limits on the possibilities of meaningfully challenging the corporate power operative there. Following Noriega (2000), who builds on Streeter (1996), we can see how these groups play by the rules of the game there, speaking the right language and not asking the big questions. We might say, following Beltrán (et al. 2005), that they have only honey, and no vinegar, at their disposal.

The issue is already shaped by the discourses of power operative in the policymaking sphere. In this way, these civil rights advocacy groups are interpellated to a discourse in opposition to net neutrality by constructing the issue as a false choice. By accepting this framing of the matter, the work of these groups, even when done on behalf of their communities, is being channeled toward policy that serves the powerful corporate interests involved.

Internet access issues like universal broadband service and net neutrality are ultimately about a more fair and equitable media structure, a more inclusive society, and a more participatory culture. Therefore, the issues should be about both equal access *to* the network and equal access *on* the network. As we will see in Chapter 6, a non-neutral internet could easily become a digital 'separate but equal,' except that broadband providers are not even pretending that these tiered networks would be equal. As a principle fundamentally about equality and nondiscrimination, net neutrality is consistent with the social justice issues that have historically

driven civil rights advocacy groups and from which communities of color stand to benefit greatly. Net neutrality, just like the more clear case of universal broadband, is all about equitable access— communities of color should not settle for just access to digital networks, but access to a digital network where they have an equal opportunity for their voice to be heard.

In many ways, net neutrality can be understood as in line with familiar issues of access and racial justice in media and some developments within the policy suggest that this framing of the issue might be making some headway. Mignon Clyburn, the first African-American woman to serve as an FCC commissioner, made a comparison of the fight for net neutrality to the ongoing campaigns of civil rights advocacy groups toward diversity in media ownership, employment, and representation in the broadcast industry. It is perhaps surprising, given the power dynamics just rehearsed here, that such a strong critique of civil rights advocates' anti-net-neutrality stances would come from deep within the policy sphere, but Clyburn is a strong net neutrality advocate who has reached out to civil rights groups to make her case for its benefits for communities of color. Clyburn delivered a speech to the MMTC, which has worked for more than twenty years on its signature issue of encouraging media ownership by people of color, where she compares this issue to net neutrality:

> [This work], I believe, should apply directly to the internet as well. Together we must ensure that people of color— and all Americans— can "participate as owners, employees, and suppliers" online. That cannot happen, however, if we passively permit a new set of gatekeepers to erect yet another set of barriers to entry… If we are all ready to call on the government to assist in the radio and television context long after the damage has been done— really when it's too late— why not when the openness of the next great communications technology is at issue?[90]

The FCC, with the help of supporters on the Commission like Clyburn, did pass rules that codify something close to net neutrality with the Open Internet Order of 2010. These regulations, as we will see in Chapter 5, however, were a weak and loophole-ridden enactment of network

neutrality principles that left wireless networks virtually unregulated and left open the possibility for broadband operators to develop exclusionary network tiers. These points are especially significant for the inclusion and participation of the marginalized groups I am concerned with here. First, these rules prohibiting blocking and discrimination of content or services online apply to wireless networks in only very limited circumstances, leaving the communities of color and lower income groups that access the internet primarily over mobile broadband with even more limitations to access and participation online. Further, by applying only to the "public internet," the Open Internet regulations allow network operators to manage separate lines for "specialized services" for only certain content— leaving broadband providers with clear economic incentives to favor content they own or to make deals with companies who can afford to pay them extra for such favored distribution. This, of course, is a move toward the inequitable media structures that exist in legacy media industries, as these "specialized services" would surely serve only content from big corporate media producers and many marginalized groups would be unable to afford the extra charges to access this privatized 'top-tier' internet, let alone afford such priority distribution for content they produce. Groups who have been historically discriminated against are exactly those who stand to gain the most from an open and nondiscriminatory network. Their participation, however, does not matter nearly as much as those speaking on behalf of the corporations involved in the process. As we will see in the next section, they can even create their own process, out of which came the policy itself in this case.

'Googizon' and the proposal of evil

In the summer of 2010, the FCC held six weeks' worth of talks at its offices in Washington, DC to discuss the future of net neutrality regulation. The invitation list for these negotiations was

short and conspicuously made up of the largest corporations on either side of the issue: representatives from Verizon, AT&T, and the NCTA (the cable industry's trade group) for the anti-net-neutrality side; Google, Skype, and the Open Internet Coalition (OIC, an issue-lobbying group led by online content providers) for the pro-net-neutrality side.[91] Citizens— or any groups representing the public interest— were not invited.[92] FCC Chief of Staff Edward Lazarus, at the behest of Chairman Julius Genachowski, convened the meetings as negotiations toward a workable inter-industry compromise on Open Internet rules— involving only the corporate players who were seen by the Chairman as necessary to please, excluding the public in whose interest the Commission is meant to protect.

This approach to regulation, that permits the corporations being regulated to work out amongst themselves regulations they can all live with, is nothing new to media policy nor to administrative policy generally, but this was a particularly blatant case. Genachowski embraced this strategy with especially unabashed fervor due in large part to the precarious position the FCC was left in following the *Comcast* decision handed down that spring.[93] As was discussed in Chapter 3, the DC Circuit's decision in the *Comcast* case eroded the Commission's regulatory authority over broadband, hamstringing its plans to enact Open Internet rules for the service. For the purposes of this chapter, we need only consider the position Genachowski saw himself in at that point: stuck between the rock of limited ability to move forward with net neutrality policy on existing ground following *Comcast,* and the hard place of massive network operator pushback to any plans to shift to Open Internet rules based on more stringent common carriage precedent. We will cover at length in Chapter 5 the issues underlying the 'reclassification' fight that followed the *Comcast* decision, but suffice to say at this point that Genachowski saw no way to get the telecom industry to agree to the regulations the FCC sought— unless they just wrote them

themselves.

These closed-door meetings flew in the face of the "transparency and accountability" widely promised by FCC reforms and the Obama administration generally.[94] The talks quickly became infamous in the tech industry trade press and were loudly decried by media reform advocates as "back room" dealings where the future of the internet would be decided, out of view and out of reach from the public.[95] While the meetings were not quite as "secret" as they were portrayed in many accounts, they were not considered part of the Open Internet rulemaking proceeding and so the matters discussed were kept from the official public record.[96] For all the vaunted public participation and engagement of the FCC's Open Internet proceeding, it was these off-the-record meetings that produced what would ultimately become Open Internet policy.

These meetings were contentious and not particularly fruitful— unsurprising, given not only the deeply committed positions of each side but also the differing priorities of each party within each camp. The two biggest points of contention in the negotiations were the same sticking points that had divided the parties throughout the process: the applicability of openness rules to 'specialized services' (emerging data-intensive services made available over broadband connections but separate from the internet) and exemptions for wireless broadband services.[97] (These issues will all be discussed in further detail in the following chapters.) Cable companies like Comcast— represented in the negotiations by the NCTA— were primarily concerned with holding specialized services at arm's length from any openness regulation. The cable industry's dominance of the wired broadband market was firmly established by 2010 (Crawford 2013), which positioned it well for offering prioritized access to exclusive content over specialized services like IPTV, and cable companies have focused their future business models on control of this emerging sector (discussed further in Chapter 6). The top priority for the phone companies,

though, was keeping regulators away from mobile services. While AT&T and Verizon have a stake in both wired and wireless broadband, their realization by 2010 that DSL services could not keep up with cable modem services, along with the huge growth potential of mobile broadband, led them to shift their focus (and investment) almost entirely to wireless (Crawford 2013). The online content companies— since the beginning led by Google— had long pushed for openness rules on phone and cable companies to ensure that in their capacity as broadband providers, either wired or wireless, they do not act as gatekeepers in seeking payment for favored status in content distribution and extracting tolls to reach users.

Genachowski's goal in these talks, meanwhile, was to work out some action amenable to the corporations involved in order for the FCC to maintain some authority to oversee the broadband market post-*Comcast*, without the need to overhaul its regulatory framework and risk the years of litigation threatened by the telecom industry.[98] In his view, this task would require getting the broadband providers and online content providers to hash out some sort of unofficial compromise on net neutrality that would pave a simpler path toward implementation as official FCC policy— or, easier still, have the deal taken directly to Congress so the Chairman could just wash his hands of the whole mess. Even though Chairman Genachowski had support for strong Open Internet rules from the other two Democratic commissioners— and, therefore, three out of the five votes necessary to pass the regulations— he held out for an Obama-esque 'grand bargain' to please all of the most powerful stakeholders.[99] The plan abdicated the Commission's public responsibility to the private corporations— not so much to regulate the involved industries, but to facilitate and formalize their own self-regulation. The process was designed for rules to make those at the table happy. It appeared as far as Genachowski was concerned, no matter how weak the rules actually were, he would have 'net neutrality' rules on the books to

point to— fulfilling the mission he was tasked to deliver on President Obama's campaign promise and sufficiently appeasing a public that supposedly would not know any better.[100]

This all played right into phone and cable companies' strategy. The network operators came to the table to negotiate with online content providers because they knew they could drag out the process and slip in exemptions that would swallow any rules that did result. Marvin Ammori, legal scholar and the lawyer who led the case against Comcast, laid out this strategy which he referred to as "Eliminating the Open Internet With a Legal Dictionary:"

> Net neutrality proponents want to prohibit ISPs like Verizon, Comcast, and AT&T from (1) blocking or discriminating for or against traffic (2) on the Internet, (3) whether consumers access the Internet through cable and DSL or wireless connections, (4) unless it is reasonable network management to ensure the operation of a nondiscriminatory network. And these advocates want (T1) a legal process that even start-ups could use, with clear rules and expedited procedures built on (T2) solid jurisdictional footing. The carriers only need one loophole (1-4: discrimination, specialized non-Internet services, wireless, reasonable network management) or one trapdoor (T1-T2: ineffective process or lack of jurisdiction) to win.[101]

Ammori explained this game plan while the closed-door talks were ongoing during the summer of 2010 and the Open Internet took quite a tortured course after that point. However— as we will see when we explore the Open Internet rules that were actually adopted by the FCC in the next chapter— by the time it was said and done at the end of that year, the carriers had not gotten only one loophole or one trapdoor, but virtually everything they wanted.

The Open Internet policymaking process took a turn for the dramatic in August 2010 when the closed-door talks were abruptly dissolved. The FCC called off the meetings following leaked news that came as a shock to nearly all: Google and Verizon had split off and cut a net neutrality deal themselves. Initial reports suggested that the agreement was a business arrangement between the two that would see Verizon prioritizing Google traffic.[102] As put by law scholar

James Boyle, however, "This was no mere deal by Google to buy preferred access for its own services on Verizon's networks, an individual violation of the principle of network neutrality by one of its most ardent prior proponents. It was a proposal that would legislatively gut that principle in general for everyone. The newspaper accounts thought too small."[103]

Google, Verizon, and the Open Internet truce

On August 9, 2010, Google CEO Eric Schmidt and Verizon CEO Ivan Seidenberg announced what they referred to as a "Legislative Framework Proposal" for open internet protections.[104] Two of the most vicious combatants in the net neutrality battle had called a truce. The plan that they agreed to was a compromise where Google met Verizon much further than halfway: Verizon agreed to a basic prohibition on blocking, but in exchange Google conceded to a whole gamut of exactly the sort of loopholes and trapdoors about which Ammori was worried. We will look at the details of the deal below, but first let us consider conditions that surrounded it.

From the moment the rumors first began to swirl, the notion of Google turning its back on net neutrality caused quite a splash. It was a huge story in the technology blogosphere and across the progressive 'netroots,' but beyond those already following the Open Internet proceedings, it even garnered coverage in mainstream venues like *The Daily Show* and the opinion pages of major newspapers.[105] Google flip-flopping on net neutrality caught national attention because it had been the loudest supporter of the principle since it came to prominence in 2006. Indeed, Schmidt's blog post in 2006 urging users to take action to protect net neutrality was key to raising public awareness on the issue.[106] Further, those who were involved in such action for net neutrality considered Google their primary corporate ally in the fight, leaving them feeling betrayed. As the most powerful force pushing for net neutrality throughout the debate, Google

was often viewed by the trade press and even media reform groups themselves as a proxy for internet users in the net neutrality debates, simply because they were calling for the same policies.[107] Of course, the coinciding interests of users and Google in the early years of the net neutrality debates should not have been mistaken for Google actually representing the public and no one should ever be surprised by a corporation looking out for any interest other than that of its profits and its shareholders. Once the interests of the public and Google no longer overlapped on the issue of strong net neutrality protections, Google and the public parted ways on the issue.

Coming forward with Verizon to commit to a flimsy version of net neutrality was seen as a direct violation of Google's "Don't Be Evil" mantra. Many upset users spoke out online, hundreds of thousands of people signed a petition against it, and there were even protests organized by Save the Internet that took place at Google's Mountain View, California offices.[108] Indicative of the sentiment, one self-described "disappointed fanboy" described the situation through an extended metaphor of finding out his partner has been cheating on him.[109] One could easily decry such a perspective as naïve faith in a private capitalist enterprise, necessarily accompanied by a much-needed wakeup call, but the fault is not fully with the Google fanboys and cash-strapped activists who counted on Google to look out for them. Google works hard to inspire exactly this sort of righteous devotion and is actually quite distinct in successfully cultivating an image as the exception to the rule of vile multinational corporations. Siva Vaidhyanathan speaks to this at length in *The Googlization of Everything— And Why We Should Worry* (2011). Vaidhyanathan discusses how Google's stated objective— "to organize the world's information and make it universally accessible and useful"— is presented more like a magnanimous public service mission than a profit-seeking business plan. Further, Google's "Don't Be Evil" motto in particular invites us to not worry about how big and powerful the

company is, so long as we trust that they use that power for good— we accept Google as our dictator online because we believe it is at least a benevolent dictator.

Even without buying into the 'good guy Google' discourse, we still have to ask why Google would turn its back on net neutrality and become, in one of the more colorful accounts of the situation, a "Carrier-Humping, Net Neutrality Surrender Monkey."[110] Google's alignment with Verizon cut against the former's historical reliance on the open internet for its business model. Google's meteoric rise from fledgling startup to dominance online was made possible by net neutrality— with no preferential treatment for incumbents in the search market like Yahoo! and ISPs unable to act like gatekeepers, Google had lowered barriers to entry and relatively fair competition saw their superior search engine succeed. As it loves to play up this freewheeling startup image that no longer fits the reality of the massive corporation it has become as it leveraged the success of its search engine into adjacent markets across the web and tremendous revenue in the online advertising business, Google has volunteered to be the poster child for net neutrality success stories. Allowing for 'the next Google' is one of the most common tropes found in calls for protecting net neutrality, using the company's founders Sergey Brin and Larry Page as representatives for all the mythical 'guys in the garage' surely working on the next 'disruptive innovation' right now.[111] Beyond this romanticized image of Google as the startup that conquered the world thanks to net neutrality, Google the corporate behemoth that exists today depends on the open internet to bring in cash hand over fist. The major reason behind Google's push for Open Internet rules is because free and universal access to content and services across the internet means free and universal access to lots of Google content and services. The more people do online, the more they do with YouTube, Blogger, Gmail, Google Search, Google Maps, Google Books, Google Docs, Google Drive, Google News, and (for

maybe a few people) Google+— and, of course, the more they see its targeted ads all over the web. As Vaidhyanthan (2011) explains, activities that generate revenue for Google are so deeply rooted in the web— Google has enough dominance of the open internet as it is now— that for the most part, what is good for the internet is good for Google.

At least that was consistently the case until Google shifted from innovative young company into just another incumbent seeking to shore up its dominance. It may have once looked out for the little guys shortly after it was one of them, but the move with Verizon marked Google's full transition to enjoying the clout to establish the conditions necessary for the maintenance of its control at the expense of innovative newcomers. By 2010, Google was more interested in protecting its turf and ensuring a status quo where its current business model remains dominant— to use the lingo Silicon Valley favors, Google is no longer the 'disrupter,' but the one seeking to not be 'disrupted.' By throwing its weight behind such a watered-down definition of net neutrality, Google opened the door to a world where preferential treatment for those with the deepest pockets would be the new normal online— a world where it is one of the exclusive few able to survive. Google took advantage of net neutrality to make it big and then traded the principle away in exchange for its own interest, showing itself as no different than any other elite in our neoliberal times: climbing to the top with public goods and then pulling the ladder up behind it.

When Google was seen embracing Verizon, the public displays of corporate affection caught many off guard— however, Google and Verizon had been frenemies for years by the time they came forward with their net neutrality compromise. The two are an odd couple in many ways, with conflicting business models and previously very visibly on opposite sides of the net neutrality issue. Like any relationship between providers of content and providers of carriage, its

logic shows in how each depends on the other: Google needs Verizon to reach its users and Verizon needs Google on its networks.

Their relationship certainly began rocky. When Google bid $4.6 billion on a prime chunk swath of wireless spectrum in the 2007 FCC spectrum auction, it was not counting on actually winning and developing a wireless network. Rather, Google sought to push the winning sum above the mark it had persuaded the FCC at which to require the eventual owner to abide by openness requirements— putting its money where its mouth was on net neutrality and pressing openness into a wireless environment that had previously been defined by very tight control by carriers. It was Verizon that won the spectrum auction and, with much consternation, it developed the 4G LTE mobile broadband network that now operates over that swath of spectrum in an open fashion, allowing any device to connect to the network and agreeing to not block any traffic. This was a breakthrough for net neutrality to be the rule of the road on a mobile broadband network, but it was also a tactic for Google to gain a foothold for its new Android mobile operating system (OS). At that point in 2009, the early smartphone market was purely dominated by Apple's iPhone, which was available only through AT&T, and Google saw breaking this closed carrier-exclusive model as the best way to break into the exploding mobile market— hence, its interest in an open mobile broadband network. While the smartphone market at the time of this writing is somewhat more open than it once was, Google was unable to fully upend the closed mobile network structure (represented by mobile network operators' blockage of Google's Nexus One handset), though, and it soon realized it had to come crawling to a carrier.

The Googizon partnership was formalized by 2009, when the Droid X smartphone, built with Google's Android mobile OS, was made available exclusively for Verizon's wireless

network. This was a crucial step for Google into the mobile software (and eventually hardware) market— and, therefore, the lucrative mobile advertising market adjacent to it. It also provided Verizon with a marquee rival to the iPhone while it was still available only for AT&T's network.

It was not long before the two grew closer on policy issues. Schmidt and Verizon Wireless CEO Lowell McAdam expressed their shared commitment to net neutrality in principle— if not in specific practice— in a co-authored blog post in 2009 titled "Finding Common Ground on an Open Internet" that was cross-posted on both the Google and Verizon company blogs.[112] In 2010, Schmidt and Seidenberg together published an op-ed in *The Wall Street Journal* saying that, while they do not always see eye-to-eye, they can both agree that there should be "minimal government involvement" with the internet.[113] The two corporations even submitted a joint filing to the Open Internet FCC proceeding tracing some of this "common ground."[114] By the time the FCC began the closed-door talks over the Open Internet rules, then, Google and Verizon were well positioned to take the lead in finding a compromise. That the two of them worked out a side deal to the side of the side deal, though, was surprising to the involved parties and unsettling to Genachowski, who saw Google and Verizon as undermining his process and his hopes for a wide 'consensus' (read: industry-supported settlement) with which to move forward.[115]

When the Googizon deal was first leaked, there was a large public outcry that left the two companies struggling to spin their agreement for the best. In the press conference call, joint blog post, and *Washington Post* op-ed from Schmidt and Seidenberg that announced their Legislative Framework Proposal, Google and Verizon sold it as a compromise necessary to move past the stalemate and closer to some form of enforceable net neutrality.[116] The two sides maintained that the deal was a fair way to protect the open internet while providing network operators with necessary flexibility— but it was clear that Google had conceded much.

Suggesting just how far Google had shifted toward a negotiated position on net neutrality, Schmidt positioned his company in between network operators on the one hand and net neutrality advocates on the other: the Google CEO told reporters, "We've been talking to Verizon for a long time about trying to get an agreement on what the definition of Net neutrality is… We're trying to find solutions that bridge between the sort of 'hard-core Net neutrality or else' and the historic telecom view of no such agreement."[117] Not only does this speak to Google's presumption to be the rightful arbiter of net neutrality, but it also demonstrates the company's willingness to distance itself from the public interest representatives it once aligned itself with so as to frame itself in some reasonable middle ground in between two overzealous extremes. This is consonant with the way that net neutrality came to be represented in the policymaking discourse as a radical position— treating true openness as just as intolerable as total corporate control— showing the sacrifice of some of the most crucial elements of open internet governance as nothing more than the give-and-take of sensible pragmatism.[118] This, of course, is what happens when defining the issue is left up to two corporations— the public interest becomes a foil to be left aside as the scope of practical possibilities is limited to only between one profit-maximizing interest or the other.

Google predictably took the brunt of the public criticism and moved quickly into damage control mode. For instance, in a blog post published shortly after the proposal was released, Google public policy executive Richard Whitt laid out the company's version of the "facts," as separate from the "myths" surrounding its dealings with Verizon. Here is how he explained the situation:

> MYTH: Google has 'sold out' on network neutrality.
>
> FACT: Google has been the leading corporate voice on the issue of network neutrality over the last five years. No other company is working as tirelessly for an open Internet.

> But given political realities, this particular issue has been intractable in Washington for several years now. At this time there are no enforceable protections[…] against even the worst forms of carrier discrimination against Internet traffic.
>
> With that in mind, we decided to partner with a major broadband provider on the best policy solution we could devise together. We're not saying this solution is perfect, but we believe that a proposal that locks in key enforceable protections for consumers is preferable to no protections at all.[119]

Not only does this post further demonstrate how Google portrayed itself as representing the interests of users but also how it presents what is best for itself as the same as what is best for the public. Google gave up on a truly open internet as too difficult to achieve, because the phone and cable companies who shaped the policymaking debate would not accept actual net neutrality. As Whitt implies, sure, net neutrality would be "perfect," but Google was not about to make the "perfect" the enemy of the 'good.' Whitt was correct that there were no enforceable net neutrality protections before their proposal, but let us now consider in more detail if the Googizon rules were even much better.

The Google-Verizon Legislative Framework Proposal

The Open Internet Legislative Framework Proposal from Google and Verizon is a deceptively simple document.[120] It is just two short pages with no legal force behind it and much of it simply reiterates the largely uncontroversial basics of net neutrality. It was pivotal in making progress toward the enactment of Open Internet rules. Just to get to that point, however, Google dealt away to Verizon much of what would actually protect net neutrality: the proposal is riddled with loopholes, leaves little room for meaningful regulatory oversight, and set a troubling precedent for the definition of net neutrality.

The basics of net neutrality were protected by Googizon. Just as with the rules proposed by the FCC at the beginning of the Open Internet rulemaking process in 2009, the heart of the

Googizon proposal came from the Commission's 2005 Internet Policy Statement: broadband providers cannot block content, services, applications, and devices.[121] Also following from the FCC Open Internet proposal, Googizon added to these central elements a requirement for transparency in network management practices. Although a prohibition on prioritizing and throttling traffic was a point of contention at various points in the Open Internet policymaking process, Googizon did propose a nondiscrimination rule— albeit a weak one.[122] While calling for formalized protection of the net neutrality basics, though, Googizon brought to the forefront three particularly problematic provisions for the Open Internet rules.

The first troubling development from the Googizon proposal was its endorsement of prioritization for "*differentiated online services*." Referred to elsewhere in the net neutrality debate as 'managed services' or 'specialized services,' these IP-based services make use of broadband networks but for purposes distinct from providing internet access.[123] Examples of specialized services range from IPTV like Comcast's Xfinity or (conspicuously relevant to the Googizon proposal) Verizon's FiOS TV and massively multiplayer online gaming (MMOs) available at the time of this writing, to the envisioned bandwidth-intensive next-generation broadband services of the future like 3D TV and massively open online courses (MOOCs), as well as emerging telemedicine and smartgrid utilities like real-time health and energy monitoring. By defining these specialized services as "differentiated" from the internet, Googizon left this traffic to be completely controlled by network operators, with no applicability for net neutrality principles. The proposal suggested that specialized services should be "distinguishable in scope and purpose from broadband internet access service," but that they should be able to also make use of internet content, services, or applications.[124] In other words, network operators can use specialized services to provide exclusive access to, enjoy tighter

control over, and gain additional revenues from premium content not available anywhere else online— in violation of everything about the open internet, but all okay because 'specialized services' are not 'the internet.'

Although, or perhaps because, "managed services" had already been a hotly debated topic in the Open Internet policymaking process, largely out of public view, the nearly identical "differentiated services" provision of the Googizon proposal was the aspect that made the biggest splash in public discourse.[125] During the press conference call that first announced the Googizon plan, reporters began to use the phrase "private internet" as a shorthand for specialized services and, although he and Seidenberg strained to avoid its mention, Schmidt at one point said that, in spite of differentiated services, Google still preferred "the public internet."[126] From there it stuck, as "public vs. private internets" became a common way to explain the proposal in the articles and blog posts that appeared after the Googizon announcement— even inspiring an internet meme that George W. Bush was not wrong, but just ahead of his time, in referring to "internets."[127]

The proposed "private internets" immediately became a lightning rod for criticism of the Googizon plan, rightly raising concerns about fracturing networks.[128] Specialized services divide internet content and applications along access tiers that only further split up the already splintering internet. These premium tiers would only be available for those who can pay more deliver their content on that network and to those who can pay more to access it. Network operators have every incentive to develop and deploy private networks to the detriment of the open internet. First, demand for such application-optimized, higher-bandwidth, quality-assured networks depends on a lack of capacity and dependability on the open internet. Further, dominant phone and cable companies are looking to generate entirely new revenue streams under

this scheme, from both online service providers paying to deliver their traffic via private networks and users paying to subscribe to these exclusive service packages, giving the network operators every reason to concentrate their investment and innovation where the money is and not where net neutrality restricts such practices. As specialized services become the focus of both network operators and those developing the data-heavy services they target, the private internet is likely to squeeze out the public internet. We will explore the implications of this— what is often referred to as 'dirt road scenario'— in Chapter 6.

Both Google and Verizon stand to benefit from a world where specialized services are unprotected. Accepting any Open Internet rules was made more palatable to Verizon by knowing that it is able to separate out networks where it is not held to net neutrality standards. Verizon was uniquely well positioned to take advantage of this situation, as by then already the only large broadband network operator widely providing fiber-to-the-home, with its FiOS network capable of handling multiple specialized services. As with the mobile broadband situation we will discuss below, Verizon was willing to trade some limited rules on today's services for free rein over the high-growth services of the future. Google, for its part, was okay accepting openness protections only on what we might call, following Vaidhyanathan, the "classic internet" (the wired public internet) where the status quo is Google dominance— a lack of carrier control means continued Google control.[129] Further, Google did not have need to be overly concerned about broadband providers' specialized services being used to put Google-owned services at an unfair disadvantage, because for the most part it does not compete directly with network operators' affiliated content offerings. Online video is the prize for which much of the net neutrality fight struggles over, but specialized services are being primarily developed for IPTV services seeking to replace traditional cable television. Google's YouTube is playing a different game, though,

compared to services like Netflix and Hulu that still primarily rely on licensing Hollywood films and television programs and compete most directly with cable television and IPTV. YouTube has worked increasingly closely with established media industries— especially with the recording industry on its music video service Vevo— but the vast majority of its content comes from amateur creators and independent producers and it remains focused on short-form videos.[130]

For an excellent explanation of the problems with specialized services, we can actually look to Google's own words from earlier in the net neutrality debate.[131] Discussing forms of prioritization on broadband networks in a filing with the FCC from 2007, Richard Whitt (the same top Google lawyer who took the lead in defending the Googizon proposal in the "Myths/Facts" blog post referenced earlier) warned the Commission that broadband providers:

> have the incentives and the means to create a closed private network that consigns Internet content and applications to a relatively slow, bandwidth-starved portion of the broadband connection. Obviously it will be increasingly difficult for providers of Internet-based applications such as video content to compete effectively against broadband providers in this kind of 'two-tiered' broadband network. Creating a new 'fast lane' is effectively a method of discrimination, where today's fast lane becomes tomorrow's minimum bar.[132]

Further, mere months prior to calling for "differentiated services" in the Googizon plan, a comment from Google (again led by Whitt) in the Open Internet proceeding was decidedly less enthusiastic on their possibilities: "If a last-mile broadband provider dedicates only a small slice of its broadband capacity to the open Internet while reserving the vast majority of the network's capacity for proprietary 'specialized' services, the public interest will be compromised."[133] Google additionally expressed concerns that managed services could easily become an "escape hatch" for network operators to slyly avoid otherwise applicable broadband regulation.[134] This, of course, is exactly what Verizon hopes to do with its FiOS service. By the time Google came forward alongside Verizon with a thumbs-up to managed services, then, Whitt was

distinguishing the "public internet" from specialized services and saying that the latter will certainly not "cannibalize" the former.[135] Google, then, showed not only why to worry about their agreement with Verizon, but also a clear indication of just how far they slid from their previous position.

The second disturbing aspect of the Googizon agreement — and the most surprising— was its *exemption of wireless broadband* services from nearly all of the rules it proposed. Under the Googizon framework, wireless broadband access is not subject to any open internet regulation except for the transparency requirement.[136] In other words, users who connect their smartphones and tablets to the internet via 3G or 4G mobile data networks can have anything they do online blocked or otherwise interfered with by carriers like Verizon and AT&T, so long as the companies serve notice of it somewhere. The differential treatment that the Googizon framework provides between wired and wireless networks was a bit of a shock, as the net neutrality debate had until then largely operated without distinctions between forms of high-speed internet access— in the FCC's NPRM for Open Internet rules, there was no differentiation between wired and wireless.[137] Cellular networks have long been more tightly controlled, with more pervasive network management, as opposed to the common carriage tradition out of which wired internet access grew, but nonetheless, net neutrality had been understood as a normative principle for internet access regardless of the platform used for that access.

After Google pushed so hard for openness requirements on wireless networks— putting $4.6 billion on the line to do so— it was particularly stupefying that it would be the one to close the door on wireless net neutrality. Google, of course, disputed that this is what happened— for Google, the wireless exemption was a measured concession that was necessary to the negotiations. Turning again to Whitt dispelling the "Myths" surrounding Googizon, we can see

Google's explanation: "MYTH: This proposal would eliminate network neutrality over wireless. FACT: It's true that Google previously has advocated for certain openness safeguards to be applied in a similar fashion to what would be applied to wireline services. However, in the spirit of compromise, we have agreed to a proposal that allows this market to remain free from regulation for now, while Congress keeps a watchful eye."[138] Net neutrality proponents, however, were hoping for a bit more than Google magnanimously compromising on their behalf and deputizing an ever-vigilant Congress to keeping watch for them.

Google's surrender on wireless net neutrality is less surprising when we consider how much its place in the wireless world had changed since its previous spectrum auction openness stunt. By 2010, Google was firmly ensconced in a partnership with Verizon for Android and it had every interest in keeping the billions of dollars in advertising revenues it generated through these mobile devices on the carrier's network flowing. This meant not only greater incentive to find common ground with Verizon, but also that wireless network openness was not even in Google's best interest anymore. By that point, Google was no longer a new entrant in the smartphone market playing catch-up to Apple— Android smartphones have since 2010 outsold iPhones. Therefore, ensuring that carriers cannot block devices stood only to benefit Google's competitors in the position it was once in, trying to break in to the smartphone market (most notable at that time, Microsoft, which was not getting much traction pushing Windows Phones).[139]

Google's justification for allowing wireless carriers free rein over internet access, even if openness was (mostly) the rule of wired road, fell right in line with the carriers' simple argument: wireless is different, so it deserves to be treated differently. Googizon understood this difference in three particular ways.[140] Firstly, the wireless market was understood as not in need

of regulation because it is more competitive than wired— in Google's words "consumers have more than just two providers to choose from."[141] Yes, there are actually four competitive nationwide wireless carriers— Verizon, AT&T, Sprint, and T-Mobile— but this certainly lowers the bar for "competitive" quite a bit— not to mention the ongoing merger attempts (AT&T and T-Mobile) and rumors (T-Mobile and Sprint).[142] Next, net neutrality was understood as impractical on wireless because the natural scarcity of the electromagnetic spectrum makes tighter control necessary to alleviate congestion and manage the network. The technology and space on the airwaves to increase capacity and make these concerns irrelevant already existed, though, and regulating spectrum more as a commons and less as property would unlock much of this potential (Benkler 1998).[143] Finally, wireless was understood as a still nascent service that is changing rapidly— according to the dominant neoliberal discourse, this means that any regulation would surely squash it. This perspective to a certain extent misrepresented the maturity of the mobile market, but if anything, this would be reason to instill openness in this emergent phase, to ensure that the developers and users of mobile applications and services would be able to enjoy the same net neutrality conditions that led to the explosion of innovation and participation on the wired internet.

Once again, Google itself had earlier pointed to the problematic nature of exempting wireless internet access from net neutrality regulation and only months before refuted some the same arguments it later made alongside Verizon. In a filing with the FCC from spring 2010, Whitt showed how concentrated and vertically integrated the mobile industry is— Verizon and AT&T hold 62% of the market.[144] Further, Whitt pointed to the consistent pattern of blocking, discrimination, and lack of transparency by wireless carriers, strongly placing in doubt the likelihood of successful self-regulation in the industry.[145]

Allowing for mobile broadband to develop without net neutrality protection was especially cause for concern in light of the looming future where wireless is the dominant means of accessing the internet. It is clear to see that Verizon— especially as its wireless subsidiary is where nearly all of the profit and growth is— was willing to trade some rules on its wired network for a virtually regulation-free future for its wireless network.[146] The trouble with the differential treatment of wireless and wired broadband goes beyond the ways it which it distorts the internet access market, though. Mobile broadband is already the primary means of accessing the internet for much of the underprivileged population. People of color in particular are far more likely to connect to the internet primarily via smartphones, due to the lower costs of the devices and mobile data plans compared to a personal computer and wired broadband subscription (Duggan 2013: 5). When these users rely on mobile broadband that is allowed to be restricted by their carriers, while the users who can afford wired broadband at home are afforded more net neutrality protections, I assert, this is another way that the internet becomes two separate but unequal networks. Simply put, net neutrality should not be a luxury. We will discuss this further in Chapters 5 and 6.

The third worrisome part of the Googizon proposal was its suggestions for *limited regulatory authority and enforcement* of the rules. The framework calls for the FCC to enforce the Open Internet rules on a case-by-case basis, with no rulemaking authority over broadband.[147] Googizon preferred non-governmental dispute resolution processes through internet governance groups, where the role of the FCC would be not to create rights or obligations but to carry out the orders of these independent bodies. What this means is that the FCC would have authority over high-speed internet access services only to the extent to which it could enforce the specific rules of the Googizon framework as decided by other groups, with no binding regulatory power and no

basis to enact any further broadband policy. As the Googizon proposal worded it, the FCC would have "authority to *oversee* broadband," but "would not be permitted to *regulate* broadband"— an outrageous distinction that pulls the teeth out of the agency (emphasis mine).[148]

This provision was Googizon's solution to the quandary presented by the *Comcast* decision. As we saw in Chapter 3, the DC Circuit court handed down a ruling in that case shortly before the Googizon proposal was released that stripped away much of the FCC's regulatory authority over broadband and the Commission therefore faced a dilemma over how to proceed with Open Internet rules. Network operators like Verizon were downright terrified at the prospect of the FCC reclassifying broadband to be regulated as a common carriage service in response, which was (and still is as of this writing) the Commission's most viable way forward for enforceable net neutrality regulation. To the extent that the case encouraged the FCC to move in the direction of common carriage, the deregulatory *Comcast* decision counter-intuitively struck fear into broadband providers— to the point that they were willing to accept some weak rules in the short term to avoid a stronger regulatory framework in the long term. Further, while Verizon was certainly not thrilled with the prospect of FCC regulation, corporations ultimately need a venue of some sort through which to resolve disputes with other corporations— therefore, Verizon sought a comfortably circumscribed FCC with just enough muscle to do what would be needed to protect corporate interests, but sufficient limits to keep it from reaching past that role. So, seeing the writing on the wall that some sort of Open Internet rules were likely unavoidable and some form of FCC jurisdiction would be necessary, Verizon attempted to thread the needle of allowing loophole-ridden rules through without leaving room for any future regulations that could be more effective. The result, then, was the Googizon proposal's limited set of weak rules, with no authorization for making better ones— not a sustainable foundation the protection of net

neutrality.

The Googizon plan for regulatory authority and enforcement presented itself as in line with widely praised aspects of transnational multistakeholder governance, but it was ultimately a facade behind which public policy imperatives would be eroded. On the surface, the Googizon vision looked a lot like the 'co-regulatory' frameworks most prominently gaining traction in European debates about net neutrality, typically consisting of state enforcement of nongovernmental policy recommendations (see Marsden 2010). Such an approach builds on the strength of the multistakeholder global governance model of regulation that has been quite effective in managing critical internet infrastructures by encouraging more inclusive transnational participation in informal policymaking processes from transnational public, private, and civil society actors through venues like the Internet Governance Forum (IGF), the Internet Society (ISOC), and the Internet Engineering Task Force (IETF) (see Mathiason 2008, Mueller 2010). The Googizon proposal's mentions of independent bodies that would be responsible for deciding Open Internet matters nod toward these respected global internet governance forums.[149] Net neutrality should have a central place as a principle for global internet governance and these nongovernmental bodies have an important role to play in internet regulation (see Mueller 2010). However, the legitimacy of the process crucially depends on wide and diverse participation and the policy made there comes in the form of norms and standards that ultimately need the backing of the state to be binding— unfortunately, both of these are lacking at the current moment. In particular, the often highly technical discussions that take place within these groups remain too rarified for the meaningful participation of the general public and they are in danger of becoming dominated by corporate interests. Beyond this, though, Googizon remained vague enough on what it meant by such a governance model that it could just as easily mean an industry trade

group where corporations know they can get their way serving as a superficial surrogate for truly multistakeholder groups. It would also cut out even further opportunities for public participation in the process and fail to provide a fair venue for smaller companies or for individuals to represent themselves. This is the significant difference between co-regulation, with meaningful deliberations among diverse stakeholders, and self-regulation, where corporations just make their own rules.

Although it emerged from within the FCC's rulemaking process, the Googizon proposal was not meant to actually be implemented by the FCC— Google and Verizon intended their proposal to be enacted by Congress. As shown in the title of the document— "Legislative Framework Proposal"— the two companies envisioned their agreement serving as the blueprint for a bill in Congress that would codify the rules specified above and specifically authorize the FCC to enforce those rules, and nothing more. It is not at all uncommon in our neoliberal policymaking environment for corporations to write the legislation and regulations that would apply to them, but rarely is it done as conspicuously. When the criticism rolled in, Google said it did not mean to be presumptuous in dictating to Congress or doing the legislating for them, but rather that it and Verizon were merely weighing in on the discussion just like everyone else.[150] This likening of the Googizon proposal to just any other comment on the issue was disingenuous— the two companies clearly intended at least to steer the conversation toward their interests and at most end the conversation altogether. Although the proposal put the FCC in a strictly circumscribed position that greatly concerned the agency, Googizon was actually consistent with the Commission's desire to kick the can over to Congress. The goal of the FCC's closed-door talks, after all, was to deliver a deal to Congress and not have to do the hard part— it had not, however, counted on not having any part. As we will see below, this aspect of the

proposal— adoption by Congress and not by the FCC alone— would be the biggest snag.

Yet again, Google had taken the opposite side of this argument before it came forward with Verizon. The Googizon proposal called for general principles enforced through case-by-case adjudication against bad actors and without any FCC rulemaking authority, whereas previously Google had called for clear-cut rules. In a 2007 FCC filing, Whitt wrote, "[T]he agency promises to stand watch, and react only when provoked by 'bad acts.' Of course, without knowing what kinds of market behavior would trigger the FCC's involvement… the rest of us are left with serious misgivings that this approach will prove effective at preserving an open and generative Internet. Among other downsides, broad 'principles' without consistent, enforceable rules risk a significant chilling effect on innovators who rely upon regulatory clarity to assure the existence of Internet platforms without artificial barriers."[151] By the end of the Open Internet proceeding, though, Google was more a dominant incumbent than it was an upstart innovator and its interests were much more closely aligned with Verizon.

This shift speaks to a larger issue represented by the Googizon proposal and the process that led to it: the collapse of public policy as locus of regulatory force and the attendant erasure of the public interest from regulation. For all its corruptions and failures in practice, public policymaking at least in theory has its power legitimized by a deliberative, representative, participatory process and is held accountable to the citizenry. Corporations writing their own rules— even under the guise of a 'multistakeholder' process where a select few of those stakeholders hold significantly more sway— shifts the act of regulation to institutions beholden to profit-making alone. Public policymaking in the US falls short of its democratic principles, no doubt. Making better policy, though, takes engaging, rather than dismissing, the politics of policy. It means holding policymakers' acts to the principles they speak of. The reality is that,

even in an increasingly global digital age, state regulation remains a powerful force shaping technological, institutional, and social structures, a force with which it is necessary to engage in order to intervene in making these structures more equitable. Media policymaking is neither irrelevant nor irretrievable— it is not a mess to wash our hands of, but a broken system to be reformed.

The Googizon proposal represents a meeting of minds between dominant content and conduit companies on a way to almost entirely cut out state regulators from the process of regulation and further consolidate their control. Both Google and Verizon have their particular corporate cultures and interests that orient them toward this new form of self-regulation in surprisingly complementary ways. Google, the archetypical technocratic engineer-run Silicon Valley firm, looks at a dysfunctional policymaking process and sees an error to route around. On top of that, as Vaidhyanathan has explained it, Google loves stepping into power vacuums left by "state failure" to fulfill public functions, whether it is running the world's largest library or negotiating with China about human rights issues (2011). If it wanted some Open Internet rules and it worried that the FCC would never get it done, Google figured it would just do it itself. With tongue-in-cheek application of the old Silicon Valley canard, Crawford put it that the FCC was being "disintermediated."[152] In spite of Google's proclivity to do the state's work for it, intervening in policymaking to this degree was a new trick for Google. Meanwhile, writing its own rules and passing them off to the FCC is old hat for Verizon. Since its roots in the Bell monopoly, Verizon thrives on regulation— that is how it ensures it gets what it wants. In negotiating the Googizon agreement, then, Google was playing Verizon's game— and, as Boyle points out, it showed in the final result.[153]

All of this explicates the danger in counting on corporations to represent the public. The

interests of Google and those of citizens overlapped temporarily early on in the net neutrality debate— which was an immeasurable boon to net neutrality advocates at that point— but it puts the company in the position of serving as the presumptive voice of the people. In the negotiations that ultimately paved the way for the Open Internet rules, citizens had no seat at the table and were left counting on Google to speak for them.. But once its interests diverged, however, and Google revealed that it was looking out only for its own profit-maximizing interests— just as any corporation is obligated to do— the people were left out. Google, or any corporation, cannot be counted on to be a proxy for users' interests— it is nice to have a big dog on your side, but ultimately we must fight our own fights.

The Aftermath of Googizon

In the wake of Google's and Verizon's agreement, the net neutrality debate took a turn for the weird. As the Googizon framework set the standard terms on which Open Internet policy was discussed and the new *de facto* definition of net neutrality, suddenly network operators were lining up behind the new proposed regulation, while media reform groups rejected it and online content providers equivocated.[154] Although the bilateral agreement between Google and Verizon dashed Genachowski's hopes for an all-encompassing grand bargain, Googizon ultimately delivered the compromised basis for regulations that he was looking for. In framing Googizon as the pragmatic solution to ending the bitter battle over net neutrality, rhetoric in the policy sphere came to be increasingly about rejecting the "extremes" on either side of the issue— including what Powell referred to as a "religious" commitment to net neutrality.[155] From this perspective, those who pointed out that the Googizon framework represented Open Internet protections in name only were accused of holding back the important progress that had been made. Suddenly,

defense of actual net neutrality principles was declared a fringe position and Verizon was deemed to be acting as a sensible moderate. Genachowski was particularly fond of using media reform groups as foils against which to compare his self-styled virtuous centrism, based on a false equivalence between Free Press's calls for "real net neutrality" in rules free of loopholes and the truly radical vision of an internet tightly controlled by broadband providers.[156] Like Google and Genachowski, other so-called supporters of net neutrality accepted the premise that it was necessary to give up on crucial aspects of a free and open internet in order to ensure any measure of protection at all and began to back away from the progressive media reform activists who called for strong Open Internet rules.[157]

Ironically, once the Googizon framework sufficiently watered it down, the network operators became the biggest fans of Open Internet rules— and their greatest obstacle may have been of their own creation. Seeing that the Googizon framework provided them the best opportunity to end up with sufficiently defanged net neutrality rules, broadband operators lobbied Congress to enact it in fall 2010, but their attempt to pass the legislation at that point was futile. November midterm elections were a matter of months away and a Republican wave was looming on the horizon, fueled by the emergence of the Tea Party. A Right-libertarian, racially-charged, anti-government backlash to President Obama, the Tea Party appeared to be an outpouring of reactionary energy expressed in a genuine populist movement— while there was a kernel of truth to this, the Tea Party was also a product of exploitation of this energy in the service of a neoliberal corporate agenda seeking to dismantle governmental structures.[158] The Open Internet rules are an example of how the Tea Party became a sort of Frankenstein's monster: the corporations that sought to wrap their deregulatory interests in grassroots political outrage could, once it snowballed into a widespread social movement, no longer control the

people who actually believed the principled libertarianism of Tea Party discourse, which was ultimately at odds with their benefactors' corporate interests. The rhetoric that government regulation is tyranny became problematic for the corporations who stirred up Tea Party fervor once government regulation could benefit them. The Tea Party was at the height of its influence leading up to the 2010 elections and, with this pressure, Congress avoided regulation of any kind— even if the telecom corporations wanted it.[159] As discussed in Chapters 2 and 3, the Tea Party saw net neutrality as a government takeover of the internet and aligned Open Internet regulation with a "socialist" Obama agenda. Republican members of Congress who might have reliably taken corporate marching orders were quick to reject any attempt at Open Internet rules.[160]

The most influential Open Internet legislation may not have stood a chance under these conditions, but it was instrumental to the rules that were ultimately put in place. Rep. Henry Waxman, a senior Democratic Congressman and Chair of the House Energy and Commerce Committee, circulated draft legislation based on the Googizon framework. The initial leaked draft of the bill was nearly identical to the Googizon proposal, but the officially released version made some small but significant changes. The Waxman bill replicated the Googizon framework with the addition of some protections for wireless networks— no blocking websites or voice services that directly compete with carriers' phone services— and recognition of some rulemaking authority for the FCC.[161] Even with Democratic majorities in both houses of Congress, the bill did not make it far— it was rejected in committee, consistent with the sudden rightward swing of both parties directly before the 2010 election. That ended the possibility of passing Open Internet rules through Congress. But the Waxman bill nonetheless proved a pivotal link in the chain from the Googizon proposal to the Open Internet rules that were ultimately

passed.

After the failure of the Waxman bill based on the Googizon framework, the FCC was left holding the bag and, soon after, the Commission pushed through Open Internet regulations that also looked remarkably similar. Recognizing the gridlock for any rules trying to make it through Congress, several prominent Democratic members of Congress called on the FCC to enact Open Internet regulations itself— and take the classificatory steps necessary to make it happen— providing political cover for the agency to take the controversial move of acting on its own.[162] The November 2010 elections brought a shift to Republican control of the House of Representatives and a new crop of extreme reactionary lawmakers aligned with the Tea Party and the FCC saw its window of opportunity to deliver Open Internet rules of some kind drifting shut. In a rush to pass the regulations during the lame duck period before the new Congress would be sworn in with the new year, in December 2010 the Commission abruptly dropped the reclassification issue and pushed through Open Internet rules based on the new baseline of the Googizon framework and the Waxman bill. The Open Internet Order was approved on a 3-2 party line vote. Republican Commissioners Robert McDowell and Meredith Atwell Baker voted against it, saying that the regulations overstepped the Commission's authority over broadband and would need authorization from Congress.[163] Democratic Commissioners Michael Copps and Mignon Clybourn, despite— or perhaps because of— their support for net neutrality, took some convincing to vote for the Googizon-based Open Internet Order, but ultimately joined Chairman Genachowski in voting for it.[164] The next chapter will analyze the Open Internet Order which enacted the rules in depth and there we will see just how similar the rules as adopted were to the rules proposed by Google and Verizon— including the huge loopholes exempting specialized services and wireless networks from nearly any regulation.

The one major difference between the Googizon/Waxman framework and the actual Open Internet rules that came to be was the fact that they were adopted by the FCC and not Congress— a seemingly small but ultimately pivotal distinction for the eventual viability of the policy. Unsurprisingly, as soon as the Open Internet rules passed, the FCC was sued to overturn the regulations. Ironically, though, it was Verizon that took them to court: even though Verizon essentially wrote the rules that the FCC adopted, the company appealed them once they were actually put in place.[165] Why? Because having the FCC make Open Internet rules on its own was not a part of Verizon's plan— it sought to minimize the authority and regulatory role of the agency and, even if it got what it wanted in the substance of the rules, the way they got there was troubling enough to Verizon to take them to court. Verizon's concern was that if the FCC enacted Open Internet rules on its existing authority, that might be enough to enable it to further regulate broadband, and the corporation would not stand for that.

Politics makes strange bedfellows— as the cliché goes— and the politics of media policy are no different. The coalitions between Google and Verizon and between MMTC and AT&T and Comcast shaped the policy and may have been unlikely, but closer examination reveals the political economic and discursive relations that brought them together. Their discourse proved more powerful than that of citizens and the advocacy groups that represented them in the policy sphere, but their inclusion, although with limited participation, is an encouraging development to be expanded. The result of all this contestation, compromise, and discursive struggle was a set of rules that hardly any of them were pleased with. Let us look closely at those rules now.

Notes

[1] In addition to official messaging from corporations on both sides of the issue, I also draw from informal recollections, descriptions, and observations of the process that came primarily from policy advocates working for

net neutrality. I recognize that their accounts of the events are partial and represent their interested position, as well as the not unrelated fact that I largely agree with their perspective and assessment. I acknowledge that drawing from this evidence shapes my understanding of these events and analysis of them. However, this is a constraint on my research that I have had to work within because, especially in regard to the closed-door negotiations that played the key role in the corporate compromise leading to the final text of the rules, there was no other publicly available account of the process. The few insider participants in the policymaking process with whom I have had opportunities to speak with also share this perspective. The policy advocates cited below providing accounts on this were those who were close enough to the situation to have an understanding of what was going on in the negotiations, but as they were largely cut out of the process, spoke out on the exclusionary aspects of it. This is important context for their accounts that I must note here. In a future version of this project I seek to speak directly with more insider participants who can provide a more full account of the process.

[2] Open Internet Order, FCC Rcd. 17905 (2010), https://apps.fcc.gov/edocs_public/attachmatch/FCC-10-201A1.pdf: para. 11; Riley, Chris. "Light-Touch Broadband Reclassification Gets More Support." Save the Internet. Free Press, 3 May 2010. Web. 01 July 2014. http://www.savetheinternet.com/blog/10/05/03/light-touch-broadband-reclassification-gets-more-support.

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[4] Flock, Elizabeth. "Netherlands Debates Net Neutrality and Anonymity Online." *The Washington Post*. 08 July 2011. Web. 04 July 2014. http://www.washingtonpost.com/blogs/worldviews/post/netherlands-and-the-internet-arguing-over-net-neutrality-and-anonymity-online/2011/06/23/AGVdIIjH_blog.html; Biggs, John. "This Is What It Sounds like When Net Neutrality Dies." *TechCrunch*. 28 Oct. 2009. Web. 04 July 2014. http://techcrunch.com/2009/10/28/this-is-what-it-sounds-like-when-net-neutrality-dies/; Herrman, John. "Net Neutrality Worst Case." Gizmodo. 28 Oct. 2009. Web. 01 July 2014. http://gizmodo.com/5391712/net-neutrality-worst-case.

[5] "The Republican Spin Machine Is Hard at Work Trying to Stop Net Neutrality. Almost All the Comments on the FCC Citizen Feedback Site Is AGAINST Net Neutrality ... Let's Fix This!" Online discussion. Reddit. 23 Oct. 2009. Web. 04 July 2014. http://www.reddit.com/r/reddit.com/comments/9wypr/the_republican_spin_machine_is_hard_at_work/; "Show Your Relatives What Net Neutrality Means without Arguing about It for an Hour with This Helpful Website." Online discussion. Reddit. 24 Dec. 2010. Web. 04 July 2014. http://www.reddit.com/r/technology/comments/eqv0c/show_your_relatives_what_net_neutrality_means/.

[6] "I Propose That Rather than Using the Term Net-Neutrality (which Does Not Carry a Strong Connotation), We Start Using the Terms "Open Internet" and "Closed Internet". What We Have Is Open Internet and What Comcast Wants Is Closed Internet." Online discussion. Reddit. 15 Mar. 2011. Web. 04 July 2014. http://www.reddit.com/r/reddit.com/comments/g4p9a/i_propose_that_rather_than_using_the_term/; "Show Your Relatives…" Reddit.

[7] Pivotal and coleman57. "Comments On: 73 Democrats Co-sign a Letter to the FCC Warning Them to Drop Net Neutrality Rules. Lets Tell Them What We Think about the Importance of an Open Internet." Discussion forum comment. Reddit. 26 May 2010. Web. 04 July 2014. http://www.reddit.com/r/technology/comments/c8ayk/73_democrats_cosign_a_letter_to_the_fcc_warning/c0qthls.

[8] [Deleted user account] "Comment On: 73 Democrats Co-sign a Letter to the FCC Warning Them to Drop Net Neutrality Rules. Lets Tell Them What We Think about the Importance of an Open Internet." Discussion forum comment. 26 May 2010. Web. 04 July 2014. http://www.reddit.com/r/technology/comments/c8ayk/73_democrats_cosign_a_letter_to_the_fcc_warning/.

[9] I should clarify how I am employing ideas of 'populism' here. I use the term populism simply to refer to the way the image or the interests of "the people" are utilized in these discussions, both for and against net neutrality. In the

former view, 'the people' get opposed to corporations, while in the latter they get opposed to government. We will see this dynamic play out in the discourse I trace here.

[10] "Fox News' Megyn Kelly Gives a Nice Demonstration in Corporate Censorship: She Won't Let Her Guest Explain How Net Neutrality Works." Online discussion. Reddit. 12 May 2010. Web. 04 July 2014. http://www.reddit.com/r/politics/comments/c3577/fox_news_megyn_kelly_gives_a_nice_demonstration/; "Tea Party Comes out against Net-neutrality, Arguing That "the Government Would Be Thwarting the Free-speech Rights of Providers Such as AT&T, Verizon and Comcast." Does This Drive Anyone Else Crazy?" Online discussion. Reddit. 13 Aug. 2010. Web. 04 July 2014. http://www.reddit.com/r/politics/comments/d0rnm/tea_party_comes_out_against_netneutrality_arguing/; "Republican Spin Machine," Reddit.

[11] Mindependentreality. "Comment On: This Is Important, Reddit: The LAST CHANCE for 'Net Neutrality' to Become Reality Is the FCC's December Meeting. Time to Make Some Noise." Discussion forum comment. Reddit. 22 Nov. 2010. Web. 04 July 2014. http://www.reddit.com/r/technology/comments/ea534/this_is_important_reddit_the_last_chance_for_net/c16lq7e.

[12] Super__mario. "Comment On: The Republican Spin Machine Is Hard at Work Trying to Stop Net Neutrality. Almost All the Comments on the FCC Citizen Feedback Site Is AGAINST Net Neutrality ... Let's Fix This!" Discussion forum comment. Reddit. 23 Oct. 2009. Web. 04 July 2014. http://www.reddit.com/r/reddit.com/comments/9wypr/the_republican_spin_machine_is_hard_at_work/c0eu4cn.

[13] PhialNotFound. "Comment On: The Republican Spin Machine Is Hard at Work Trying to Stop Net Neutrality. Almost All the Comments on the FCC Citizen Feedback Site Is AGAINST Net Neutrality ... Let's Fix This!" Reddit. 23 Oct. 2009. Web. 04 July 2014. http://www.reddit.com/r/reddit.com/comments/9wypr/the_republican_spin_machine_is_hard_at_work/c0euhkm; Bbbobsaget. "Comment On: The Republican Spin Machine Is Hard at Work Trying to Stop Net Neutrality. Almost All the Comments on the FCC Citizen Feedback Site Is AGAINST Net Neutrality ... Let's Fix This!" Discussion forum comment. Reddit. 23 Oct. 2009. Web. 04 July 2014. http://www.reddit.com/r/reddit.com/comments/9wypr/the_republican_spin_machine_is_hard_at_work/c0eu5uk.

[14] Kristopolous and LouXVII. "Comments On: Fox News' Megyn Kelly Gives a Nice Demonstration in Corporate Censorship: She Won't Let Her Guest Explain How Net Neutrality Works." Discussion forum comment. Reddit. 12 May 2010. Web. 04 July 2014. http://www.reddit.com/r/politics/comments/c3577/fox_news_megyn_kelly_gives_a_nice_demonstration/c0pvhqr.

[15] CasualDave. "Comment On: Reddit: Stop Jacking off about Keanu Reeves and Antwon Dodson for Just One Day. Sign Al Franken's Petition to Save Net Neutrality. Only 34,000 People so Far." Discussion forum comment. Reddit. 6 Aug. 2010. Web. 04 July 2014. http://www.reddit.com/r/politics/comments/cy5ls/reddit_stop_jacking_off_about_keanu_reeves_and/c0w63yi.

[16] "Here's a New Scenario…" Reddit; Papajohn56. "Comments On: This Is Important, Reddit: The LAST CHANCE for 'Net Neutrality' to Become Reality Is the FCC's December Meeting. Time to Make Some Noise." Discussion forum comment. Reddit. 22 Nov. 2010. Web. 04 July 2014. http://www.reddit.com/r/technology/comments/ea534/this_is_important_reddit_the_last_chance_for_net/c16k3gv.

[17] "This Is Important, Reddit: The LAST CHANCE for 'Net Neutrality' to Become Reality Is the FCC's December Meeting. Time to Make Some Noise." Online discussion. Reddit. 22 Nov. 2010. Web. 04 July 2014. http://www.reddit.com/r/technology/comments/ea534/this_is_important_reddit_the_last_chance_for_net/; "Republican Spin Machine…" Reddit.

[18] ZuchiniOne, "The Republican Spin Machine Is Hard at Work Trying to Stop Net Neutrality. Almost All the Comments on the FCC Citizen Feedback Site Is AGAINST Net Neutrality ... Let's Fix This!" Discussion forum post. Reddit. 23 Oct. 2009. Web. 04 July 2014. <http://www.reddit.com/r/reddit.com/comments/9wypr/the_republican_spin_machine_is_hard_at_work/>.

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[27] "Rulemaking Process at the FCC."

[28] The OpenInternet.gov site has been taken down, but an archive of it can be accessed here: http://www.fcc.gov/files/archives/open_internet_archived_website.zip.

[29] Public Notice: FCC EXPLAINS RELATIONSHIP OF IDEASCALE POSTINGS TO THE RECORD IN THE NATIONAL BROADBAND PLAN PROCEEDING, FCC GN Docket No. 09-51, https://apps.fcc.gov/edocs_public/attachmatch/DA-10-42A1.pdf.

[30] Ibid.

[31] "About IdeaScale." IdeaScale. Web. 04 July 2014. http://ideascale.com/aboutus.

[32] "OpenInternet." IdeaScale. Web. 04 July 2014. http://openinternet.ideascale.com/.

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[34] E.g.: "Net Neutrality = A Protected Internet." Online discussion. OpenInternet. IdeaScale, 23 Oct. 2009. Web. 04 July 2014. http://openinternet.ideascale.com/a/dtd/Net-Neutrality-=-A-Protected-Internet/17859-6017; "You May Not Claim What Belongs to Me--and the Whole Public." Online discussion. OpenInternet. IdeaScale, 23 Oct. 2009. Web. 04 July 2014. http://openinternet.ideascale.com/a/dtd/You-May-Not-Claim-What-Belongs-to-Me-and-the-Whole-Public/17868-6017.

[35] David.ddrew. "Net Neutrality = No One Telling You What You Can and Cannot Do on the Web." Discussion forum post. OpenInternet. IdeaScale, 23 Oct. 2009. Web. 04 July 2014. http://openinternet.ideascale.com/a/dtd/Net-Neutrality-=-No-one-telling-you-what-you-can-and-cannot-do-on-the-web/17865-6017.

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[158] The Tea Party movement was brought to prominence primary through organizing done by Americans for Prosperity, which is funded by super-rich individuals like the Koch brothers and large phone and cable corporations. Members of the Tea Party Caucus in Congress have also received large campaign contributions from the telecom industry, especially AT&T. See: Sarlin, Benjamin. "Tea Party Allies With Telecom Industry to Dump Net Neutrality." *Business Insider*. 13 Sept. 2010. Web. 10 July 2014. http://www.businessinsider.com/tea-partys-corporate-ally-2010-9;
Top Organizations Disclosing Donations to Americans for Prosperity, 2012. Rep. OpenSecrets, Center for Responsive Politics, 2012. Web. 10 July 2014. http://www.opensecrets.org/outsidespending/contrib.php?cycle=2012&cmte=Americans for Prosperity; Kreighbaum, Andrew. *Tea Party Caucus Members Bankrolled by Health Professionals, Retirees, Oil Interests*. Rep. OpenSecrets, Center for Responsive Politics, 30 July 2010. Web. 10 July 2014. http://www.opensecrets.org/news/2010/07/members-of-tea-party-caucus-major-r/; Mayer, Jane. "Covert Operations: The Billionaire Koch Brothers' War Against Obama." *The New Yorker*. 30 Aug. 2010. Web. 10 July 2014. http://www.newyorker.com/reporting/2010/08/30/100830fa_fact_mayer?currentPage=all.

[159] A representative quote from Texas Republican Rep. John Culberson captures this tone well: "Speaker Pelosi and President Obama have taken measures to control the healthcare industry, the auto industry, the banking industry and the insurance industry. It comes as no surprise that they attempt to control commercial activity on the Internet before they lose control of Congress." See: Lasar. "Waxman's Net Neutrality Compromise: Solution or Last Gasp?" *Ars*

Technica. 28 Sept. 2010. Web. 10 July 2014. http://arstechnica.com/tech-policy/2010/09/waxmans-net-neutrality-compromise-solution-or-last-gasp/.

[160] Jerome, Sara. "Republicans Who Support Net Neutrality Caught between Industry, Tea Party." *TheHill*. 28 Sept. 2010. Web. 10 July 2014. http://thehill.com/policy/technology/121245-republicans-who-vote-to-regulate-the-internet-may-get-cover-from-telecom-groups-but-not-the-tea-party.

[161] Lasar, Matthew. "No Net Neutrality Plan from Congress, so Now What?" *Ars Technica*. 29 Sept. 2010. Web. 10 July 2014. http://arstechnica.com/tech-policy/2010/09/no-net-neutrality-plan-from-congress-so-now-what/.

[162] Democratic Sen. John Kerry led the call for an FCC regulatory solution, saying there was no hope for a legislative solution with prevailing political climate in Congress. Other Democratic members of Congress who called for FCC action included senior congressmen Sen. Jay Rockefeller and Rep. Henry Waxman (after the failure of his own bill). Reps. Ed Markey, Anna Eshoo, Jay Inslee, and Mike Doyle went further in voicing concern over the Googizon proposal and supporting Title II reclassification. See: Kang. "FCC Ends Talks for Deal on Net Neutrality." *The Washington Post*. 06 Aug. 2010. Web. 09 July 2014. http://www.washingtonpost.com/wp-dyn/content/article/2010/08/05/AR2010080502423.html; Anderson. "Google, Verizon Warned Not to "cable-ize" the Internet."*Ars Technica*. 17 Aug. 2010. Web. 10 July 2014. http://arstechnica.com/tech-policy/2010/08/congress-content-to-criticize-googleverizon-not-do-much-else/.

[163] McDowell, Robert. "Dissenting Statement," In the Matter of Preserving the Open Internet, FCC, GN Docket No. 09-191, https://apps.fcc.gov/edocs_public/attachmatch/FCC-10-201A1.pdf: 145-172; Baker, Meredith Atwell. "Dissenting Statement," In the Matter of Preserving the Open Internet, FCC, GN Docket No. 09-191: 180-194.

[164] Copps, Michael J. "Concurring Statement," In the Matter of Preserving the Open Internet, FCC, GN Docket No. 09-191, https://apps.fcc.gov/edocs_public/attachmatch/FCC-10-201A1.pdf: 140-144; Clybourn, Mignon, "Approving in Part, Concurring in Part, Statement," In the Matter of Preserving the Open Internet, FCC, GN Docket No. 09-191: 178-179.

[165] Anderson. "Why Is Verizon Suing over Net Neutrality Rules It Once Supported?" *Ars Technica*. 20 Jan. 2011. Web. 10 July 2014. http://arstechnica.com/tech-policy/2011/01/verizon-sues-over-net-neutrality-rules-it-once-supported/.

Chapter 5

Net Neutrality and the FCC Open Internet Order of 2010

It was four days before Christmas and at least one corner of Washington, DC was stirring. On December 21, 2010, during the week that Beltway politicians and press typically clear out for the holidays, the FCC held a vote on the order that represented the culmination of its nearly yearlong Open Internet proceeding and almost a decade of tangling over the issue of net neutrality.[1] The public meeting to hold the vote was postponed a week to accommodate the last bit of negotiations among commissioners and with stakeholders like those traced in Chapter 4.[2] This pushed the meeting to nearly the absolute last minute— it was held the day before Congress adjourned for the year. The impetus for the Commission's sudden urgency to hold the vote was the shift in political power coming with the beginning of 2011: the new year was to bring with it a new Republican majority in the House of Representatives (Downes 2011). The Tea Party movement drove a Republican wave in the 2010 midterm election and the renewed energy of Right-libertarian ideology was sure to increase Congressional pressure on the Commission even more.

Chairman Genachowski and his staff had to scramble to make the set of rules based on the Googizon framework we saw in the previous chapter into what became the Open Internet Order of 2010. The scheduling of the vote was announced in the middle of the night, less than twelve hours beforehand. Genachowski did not internally circulate the final text of the Order until about an hour before the announcement about the meeting was released, leaving commissioners and staff working through the night to dig through the changes made to the rules they would soon

have to vote on. Meanwhile Genachowski leaned on the two other Democratic Commissioners—Michael Copps and Mignon Clybourn— to vote with him to pass the Order. For their part, the two Republican Commissioners—Robert McDowell (a hero for corporate libertarians) and Meredith Atwell Baker (who shortly after the vote left to take a job as a lobbyist for Comcast)—were dead set against Open Internet rules, no matter how watered down they were. Rightfully suspicious of the compromised version of net neutrality contained in the rules, Copps and Clybourn took some convincing, but they ultimately joined Genachowski.

The FCC passed the Open Internet Order of 2010, with little fanfare, by a vote of three to two along party lines, which at the time was rare for an agency that typically reached unanimous approval on highly consequential decisions. Genachowski was the only one who fully supported the Order— even the passing votes from Copps and Clyburn were not "approving" but only "concurring" and "approving in part and concurring in part," respectively.[3] The finalized Order had not been made available to journalists by the time the vote was held and, in fact, was not publicly released at all until two days later, on December 23 (Downes 2011). This rushed, inconspicuous enactment was an ignoble end to an unusually high-profile policymaking process at the FCC. The Open Internet proceeding began with high hopes from the Obama administration for a united effort to protect common principles like freedom and openness, yet ended up a bitter and divisive struggle with an outcome that left nearly all unsatisfied.

This chapter examines the text of the Open Internet policy that resulted from this process, looking for the ways in which this 'net neutrality' policy related to net neutrality principles (or, more aptly, did not). Through a close reading of the FCC's Open Internet Order of 2010, informed by political economic, legal, and interpretive analysis, this chapter breaks down each of the rules and evaluates its efficacy in reaching the goals and values of net neutrality. Through

this analysis I find that the FCC's Open Internet policy was too far removed from net neutrality principles to meaningfully assure equality in use of internet access and further represents a significant point of departure on the path of emergence that internet infrastructures have gone down.

In addition to loopholes we will see within the policy text itself, the rules were also troubled by the regulatory framework within which they were enacted, which goes back to the definitions discussed in the previous chapter. Shortly before the FCC approved the Open Internet Order, Chairman Genachowski proposed and then summarily dropped a plan he called the "Third Way" in which the Commission would define broadband as a telecommunications service and reclassify it under Title II. How and why the FCC did not go the "Third Way" is not only important context for the Open Internet Order but, I argue, a pivotal influence on the shape of emerging internet infrastructures and ultimately a more consequential matter than the Order itself. I assert that the failed "Third Way" reclassification plan was a pivotal moment in the process that worked to determine the influence of net neutrality policy as much, if not more, than that of the Order itself. The "Third Way" plan also represents a crucial site of analysis to see not only how the Open Internet policy that the FCC adopted was not inevitable and to place into the historical record a representation of what could have been, but also as an articulation of an alternative discourse that existed within the policy sphere at the time that can help us understand potentially different paths forward in the future.

Though other scholars have summarized parts of this policy and its processes, my close reading reveals how the text of the regulations themselves established a vision of internet infrastructures that is actually more consistent with a privatized and splintered future for broadband networks than it is with truly open and neutral general-purpose communications

infrastructure. There has been much scholarly attention to and engagement in the policy proceeding, especially from lawyers and economists, but very little fine-grained scholarly analysis of the Open Internet Order itself exists (and even less from a critical studies perspective). Exceptions to this include close legal and economic readings of the Order itself from van Schewick (2010), Kendra Leghart (2010), and Larry Downes (2011). This work, as well as that from interested media advocacy groups, informs my analysis here, although I develop a finer-grained level of depth into the text of the rules themselves and contextualize them with additional analysis of the text of and process around the abandoned Third Way reclassification proposal. Some legal scholarship considering FCC regulatory authority and classifications for broadband, including analysis from Lee Selwyn and Helen Golding (2011) and Emily Roxberg (2011), has gotten into the reclassification debate and the Third Way's place within it; however, hardly any in-depth academic work has been done on the Third Way proposal itself and what it meant for net neutrality, none of which has considered it as an artifact for interpretive or discursive analysis.

While the 2010 Open Internet rules were struck down in 2014 (and the Third Way did not make it very far), I assert that they remain important as a site of analysis for a number of reasons. First of all, they represent perhaps a high water mark for net neutrality in US communications policy, however short lived— discussed by policy insiders as the best that was possible within political constraints and indeed stronger than the FCC's recently proposed Open Internet policy that has followed (which we will briefly consider in the Conclusion). This, however, is more a shameful designation than anything, because the rules as adopted were so weak. Also, as the product of the policy discourse we have traced through this dissertation, it remains as a document a crystallization of the discursive construction process that necessitates a close reading in service

of analysis of the emergent media keywords operating there. Finally, it was the language of the Order itself that worked to shape the material relations that existed in its aftermath and its reverberations are still felt in practice today. In the remainder of the dissertation we will see how the Order set the stage for a pending post-net-neutrality industrial, technological, and legal environment that arose in the time following its implementation, and looking closely at the Order itself can help us understand why.

The first section takes up the three core rules that the Order applied to fixed broadband internet access providers: transparency, no blocking, and no unreasonable discrimination. The next two sections then explain the two major exceptions to these rules: the "reasonable network management" exception and the distinction between wireless and wired internet access that exempts wireless broadband from the nondiscrimination standard and parts of the no-blocking rule. The final section provides context for the Open Internet Order by laying out the debate surrounding the FCC's eventually scrapped "Third Way" proposal, which serves as a sort of coda to the discussion of the implications of classification decisions in regulatory processes offered earlier in the dissertation. Let us begin by looking at the rule themselves.

The Open Internet rules

The FCC's Open Internet Report and Order of 2010 ("the Order") lays out three rules for fixed (or "wired") broadband internet access, two rules for mobile (or "wireless") broadband internet access, and an exception that applies to them. A slippery but important distinction, these rules apply only to *access to* the internet, not to the operations of the internet itself. That is, with this Order the FCC did not attempt to regulate any particular kind of internet content, applications, services, or devices (what the Order refers to as "edge providers"), any behavior of end-users of

the internet, or any services operating within the backbone of the internet (the "upper tier" network operators who control the major thoroughfares of the network). These rules only applied to *broadband internet access providers*, typically the incumbent facilities-based network operators like phone and cable companies that own the DSL, cable, or fiber optic pipes that make up the "last mile" networks connecting their subscribers to the internet *per se* (e.g., AT&T, Verizon, Comcast, Time Warner Cable.). The rules also applied to other, less dominant broadband internet access providers, like satellite providers (e.g., HughesNet), fixed wireless providers (e.g., WiMAX providers like the now defunct ISP Clearwire), and mobile wireless providers (like cell phone carriers including T-Mobile and Sprint), as well as independent ISPs who lease DSL facilities from incumbent phone companies (e.g., ResTech, the tiny local company that is my ISP in Madison, Wisconsin).

To summarize: the first of the three major rules required broadband providers to be *transparent* in their service offerings and management of their networks; the second rule prohibited broadband providers from *blocking access* to content, applications, services, or devices; the third rule prevented fixed broadband providers from *discriminating* in transmitting network traffic. All of the three were qualified by the principle of "reasonable network management:" broadband providers were permitted to take actions that violate these rules only if they served a legitimate network management purpose. Finally, mobile broadband internet access services were given a separate set of fewer rules. I will now discuss each of these in turn.

1. Transparency

The first rule requires transparency from broadband providers: full disclosure to the public of details about their networks and how they are run. The first rule reads:

> A person engaged in the provision of broadband Internet access service shall publicly disclose accurate information regarding the network management practices, performance, and commercial terms of its broadband Internet access services sufficient for consumers to make informed choices regarding use of such services and for content, application, service, and device providers to develop, market, and maintain Internet offerings.[4]

At a minimum, this information is to be prominently displayed or linked to on the provider's website and disclosed at the point of sale of the service.

This rule's first mandate is that broadband providers must disclose their *network management practices*.[5] This category includes describing congestion management actions, such as the types of traffic acted on, the purpose and criteria for these actions, the effects on end-user experience, engineering standards, and usage limits like data caps and the consequences of exceeding them. It also includes application-specific behaviors, like blocking, controlling, or interfering with specific protocols or ports or any other ways that certain applications or classes of applications are either favored or limited (such as Comcast's actions in throttling BitTorrent traffic discussed in Chapter 3). Further disclosure is necessary for any restrictions on the types of devices that can connect to broadband networks and the procedures for any device approval process. Finally, any practices to ensure network or end-user security must also be made public.

Second, broadband providers have to provide accurate description of the internet access service they offer and its performance characteristics.[6] This includes the network technology used (such as cable, DSL, or fiber), the expected and actual speeds and latency, and its ability to support real-time applications. This also includes providing notice of "specialized services" (other broadband-based services that are not managed in an open manner, which will be discussed further below) that are offered and how they can affect the available capacity for broadband internet access.

Third, broadband providers are required to fully explain the commercial terms and conditions of their service.[7] This includes pricing information like monthly subscription rates,

usage-based fees or data caps, fees for the early termination of service, and any other additional fees. Additionally, broadband providers must lay out a privacy policy, such as addressing if network management practices entail the inspection of network traffic (such as using deep packet inspection to gain access to user data) and what user data is stored, provided to third parties, or used for purposes not related to network management. Finally, redress options for resolving complaints and questions must be made available.

This transparency requirement was widely accepted as appropriate for broadband providers, but is not likely to be effective in protecting the open internet on its own. It is not burdensome to ask providers to simply make the relevant information publicly available and, in fact, most broadband providers were already in compliance with this practice. Transparency is important because accurate information regarding the service that broadband providers offer and the way they manage their networks is a basic precept of fair consumer and business practices. End-users must be able to make informed consumer decisions and content providers need the certainty to know what factors can play into reaching their users. If broadband subscribers have access to this information, they can, in theory, assess their level of satisfaction with the way that their broadband service is managed and decide to switch to another provider if they are not satisfied. How meaningful a role this 'market discipline' function of transparency can play in the case of broadband providers, on its own, is highly debatable, however. Competitive marketplace incentives for broadband providers are not strong, as end-users have usually only two choices of broadband providers and, between termination fees and installation and other hassles, switching to a competitor is not exactly easy.[8] Therefore, as the FCC perceived, rules beyond a simple transparency requirement are necessary to preserve open internet access. What is troubling about this, however, is that, as we will see in the Conclusion of this dissertation, this is the only rule of

the Order that remained standing following the legal challenge to the FCC in 2013.

2. No blocking

The second rule was a relatively straightforward prohibition against broadband providers' blocking user access to content, applications, services, and devices. This rule codified the principle of universal end-user access to all the resources connected to the internet that the FCC first laid out in the 2005 Internet Policy Statement.[9] The second rule reads:

> A person engaged in the provision of fixed broadband Internet access service, insofar as such person is so engaged, shall not block lawful content, applications, services, or non-harmful devices, subject to reasonable network management.[10]

The Order also laid out a few additional clarifying notes related to this rule. It specifies that this rule was meant to apply to all network traffic, even that which does not fit neatly into one of the four categories explicitly named.[11] It also stipulates that degrading access to a resource to the point of it being effectively unusable counts the same as blocking it.[12]

The blocking clause also stipulates that it is a violation of this rule if the only way for a content, service, application, or device provider to avoid being blocked is for them to pay an extra charge.[13] Establishing this condition was important, because allowing the phone and cable companies that own the only two wires that come in and out of nearly every American home to exploit their position as the 'terminating access monopoly' would give these corporations the power to decide what content they want to allow to reach their subscribers. This is exactly the sort of centralized gatekeeper position that the internet has lacked through its history, and that has contributed most heavily to its success as a medium of free expression, as Lessig (1999, 2004), Benkler (2006), and many others have argued.

Allowing broadband providers to levy 'termination fees' to avert blocking, the FCC reasoned, would also distort the market for online content and services by favoring only those

who could afford these additional charges. As discussed in the Introduction, content providers already pay network operators for bandwidth just like any other user of the internet, as well as for transit services that route content from their servers to end-users. Allowing broadband ISPs to charge content and service providers extra on top of their transmission fees for access to subscribers would be excessive and work to discourage innovative content and services (Lee and Wu 2009). This rule, therefore, banned such toll-booths from being erected on the off-ramps of the network.

Up to the present, the no-blocking principle has stood as a well established and widely accepted norm in the broadband industry. When users pay broadband providers for access to the internet, they assume they will have access to the whole internet, not just selected parts, and network operators have historically acted in a manner consistent with this. Further, refusing to load certain websites or preventing the use of particular online services has been considered by many to be analogous to censorship. This can be seen very clearly in the transnational context, where the practice of blocking access to portions of the open internet by repressive regimes around the world has been loudly denounced by human rights advocates and even the US government (MacKinnon 2013). The Open Internet rules, consistent with this precedent, established that blocking internet traffic should be considered just as unacceptable when done by private parties like phone and cable companies, a far more likely scenario in liberal democracies where power is frequently concentrated in multinational corporations and whose governments are less likely to intervene directly in the flow of free speech. However, the impact of this no-blocking rule was complicated in the Order's stipulations by broad exceptions framed in terms of maintaining order, logistically and legally. As such, its no-blocking principle came with a few important caveats.

The first was the exception for "reasonable network management." This broad stipulation was defined rather vaguely and left network operators with significant latitude to interfere with traffic under the auspices of technical necessities. In a separate section below I will explore the way this was defined in more detail.

The next caveat was the qualifier of "lawful" attached to the description of the types of resources that cannot be blocked. The Order stated that these rules were not intended to inhibit broadband providers from stopping "transfers of unlawful content" or "unlawful transfers of content."[14] The primary example of "unlawful content" given in the Order was child pornography; the primary example of "unlawful transfers" was distributing copyrighted content without authorization. The Order presented this as necessary law enforcement based in moral authority— who wants to defend child pornography?— but these plain-faced claims belie a number of tricky issues. They demonstrate the way that key discursive constructions accompanying the introduction of new media in liberal democracies have often been deployed as a means of restricting the widest range of free expression and open access (Marwick 2008). In the case of internet content, during the War on Terror era attaching a keyword such as 'terrorism' to particular online activities has been considered sufficient justification for US intelligence and national security forces to shut them down, from the investigative journalism of WikiLeaks to the anti-corporate 'hacktivism' of Anonymous (Coleman 2012; Brevini, Hintz, and McCurdy 2013). The word "unlawful" here, though reasonable on the surface, has been used in a similar manner: who gets to decide what activities are "unlawful" and what justifications exist for this distinction? The Order did not establish definitions or procedures for ensuring transparency or providing public review measures, giving broadband providers autonomy over deeming traffic "unlawful." This left network operators with the power to block content based on their

interpretation of its legality, with little public intervention.

In particular, the explicit nomination of copyright infringement as a type of internet traffic broadband providers were permitted to block is especially worrisome.[15] Given the long history of intellectual property enforcement being used as a mechanism of control over certain kinds of speech and content by the media industries (Boyle 1997, 2008; Coombe 1998; Gillespie 2006; Lessig 1999, 2001, 2004; McLeod 2001, 2005; Vaidhyanathan 2001), we can expect that such an exception would be used in ways that limit and chill free expression. Indeed, as the recording industry began to abandon its mass litigation campaign in 2009, their "anti-piracy" strategy increasingly depended on deputizing ISPs as copyright enforcers. Through an agreement between the film and recording industries and the largest network operators reached in 2011, these broadband providers instituted a "graduated response" initiative called the Copyright Alert System which sends six warning messages followed by penalties to users allegedly engaged in infringing activities online. With this 'six strikes' system, if the allegations of infringement continue after the warnings have been received, broadband providers must impose on users a series of "mitigation measures," including temporary reductions of network speeds, redirection to pages of "educational information" on copyright, and termination of broadband service.[16] The "unlawful transfers of content" exception in the Order opened up a similar scenario by which uncontested corporate throttling of certain kinds of traffic, blocking of sites or services, and even disconnection from the internet altogether became completely permissible in the supposed pursuit of net neutrality.

Given the ever-expanding power and scope of intellectual property rights, free speech online runs the risk of becoming collateral damage in the protection of traditional media industry business models. Overly broad allegations of infringement, insensitivity to fair use and

transformative works, and little in the way of due process are all ways that users have found their legitimate activities swept up in "anti-piracy" crusades (Lessig 2004). Further, users' privacy rights are violated when broadband providers are allowed and encouraged to monitor activities online on the lookout for copyright infringement— users should not be presumed guilty of piracy until proven innocent. Broadband providers have become more willing to participate in these schemes for fear that they would be implicated with secondary liability for their users' infringing activities. Ironically, broadband providers' own more active network management since 2005 may be eroding their previously enjoyed "safe harbor" status under the Digital Millennium Copyright Act: liability exemptions for internet intermediaries are fewer when they are in a position to have knowledge of and/or control over the unauthorized transmission of copyrighted content (Frieden 2007: 4).

Notably, however, blocking alleged copyright infringement is not included as a form of "reasonable network management," as it was in the original definition in the FCC's 2009 NPRM for Open Internet Protections.. In one sense this change was a victory for those who pushed for its removal: online content providers like Google, who sought to protect access to sites and services like YouTube which attract a great deal of copyright scrutiny, and advocacy groups like the EFF, who seek copyright reform as a civil liberties issue. The FCC agreed with their argument that copyright enforcement is not directly related to maintaining the proper technical functioning of the network and is, therefore, inappropriate to include in the definition of reasonable network management. Moving the "unlawful" exemption to its own clause does reduce its scope a bit, as it is not subject to the "reasonableness" standard of network management: this could have opened up broadband providers to be able to argue, for instance, that it would be "reasonable" for them to block all peer-to-peer filesharing traffic, no matter if

some of it is lawful, because so much of it is unlawful (von Lohman 2010). The blocking exception for copyright enforcement remained as its own clause, however, so it was likely to be a significant loophole to be exploited.

The "non-harmful" qualifier to the no-blocking rule brought with it similar questions to the "lawful" condition. "Harmful" in the network traffic management context is generally used to refer to unwanted content like spam, and traffic posing network security threats like malware, but the Order left it open to broadband providers to define for themselves what traffic would be harmful to their networks. It is certainly appropriate to allow for narrowly tailored actions to address harms to the network, but the "harmful" label had the potential to be applied more broadly in problematic ways. For example, network operators could greatly restrict devices that are allowed to be attached to the network, with effects that could seriously stifle innovation—indeed, during the monopoly era, AT&T's justification for not allowing any third-party devices to attach to the phone network was the potential for "harm," permitting them to monopolize the telephone receiver market. Further, distributed denial-of-service (DDoS) attacks (where a user-led, coordinated flood of network traffic overwhelms a web site or service to shut it down) fall under the category of harmful traffic that would be blocked, but are more akin to the digital equivalent of a sit-in and are a crucial hacktivist tool of peaceful resistance. Although these caveats weakened the no-blocking rule, it was an important basic protection for universal access that was important to have on the books. The Order went on to address the equality of the traffic that is accessible in the third rule on nondiscrimination.

3. No unreasonable discrimination

The third rule limited what broadband providers could do in terms of favoring or degrading

network traffic. The rule reads:

> A person engaged in the provision of fixed broadband Internet access service, insofar as such person is so engaged, shall not unreasonably discriminate in transmitting lawful network traffic over a consumer's broadband Internet access service. Reasonable network management shall not constitute unreasonable discrimination.[17]

This was not a blanket nondiscrimination rule, for the Order states that some forms of differential treatment are beneficial and must be balanced with restricting harmful traffic interference. Under the rule, any network discrimination must be defensible as "reasonable."

The Order went on to list examples of forms of discrimination considered "reasonable."[18] The unstated criteria uniting these examples were consistencies with some of the founding net neutrality principles of internet governance— discrimination was only permissible under these rules if it did not jeopardize the overall open character of the network. Differential treatment of traffic that is transparently disclosed was considered reasonable. Transparency is an important provision, but, as noted above, transparency alone is not an effective solution to harmful interference. Any practices that conform to the standards and best practices laid out by internet engineering, governance, and standards-settings bodies were also considered reasonable. The Order noted that this stipulation did not imply any delegation of authority to outside organizations, but it was an admirable recognition of the important role played by such multistakeholder groups in the global governance of the internet.

The final two examples given as potential justifications for reasonable discrimination made explicit references to what were referred to as "end-to-end" principles, which included the key values of "application blindness" and "end user control" that informed the original design of the internet as an open general purpose infrastructure for decentralized connection and participation. The first end-to-end value the Order used to determine "reasonable" discrimination was the principle of "application agnosticism."[19] As we have discussed, the original end-to-end

architecture of the internet meant that the pipes and switches that transmit and route traffic were 'blind' to the applications and services that used it— the only job of the network core was to provide general services necessary for any type of traffic to move from one end of the network to the other. Now that core technologies are no longer technically blind to the traffic that flows through them, the openness of the network depends on network operators perhaps seeing but not caring what particular edge applications and services make use of their infrastructure.

Based on this principle, the Order stated that differential treatment must be "user agnostic," so that traffic prioritization could not be based on its type, source, or destination.[20] This stipulation banned discrimination based on types of applications or services, such as online video or peer-to-peer filesharing, or even characteristics like necessary protocols or latency sensitivity, as well as specific applications, such as Hulu, Comcast Xfinity, or BitTorrent. It also banned discrimination based on the author, publisher, site, subject matter, or viewpoint of pieces of online content. Under this rule, then, broadband providers were free to, for instance, limit overall bandwidth available to users during peak traffic periods but were not allowed to throttle bandwidth available for particular applications or classes of applications, like BitTorrent specifically or peer-to-peer filesharing generally.

The other end-to-end value the Order used to determine "reasonable" discrimination was the principle of "end user control."[21] Again, as we have discussed, with end-to-end architecture, decisions about the uses to which the network is put are made not by those who own and operate the core network itself, but by the users at the ends of the network. Content, services, and applications are made available at the edges of the network and users are able to connect with and use whichever of these they choose. When consistent with the traditional end-to-end values of the internet, the broadband service provided by network operators is merely to carry the traffic

of their users' choice, with the minimal amount of interference possible.

In evaluating what forms of differential treatment are permissible under this standard, then, the Order additionally determined "reasonableness" by the degree to which the connections and transmissions of internet traffic are under the control of end-users and not the intermediaries they depend upon to facilitate them. A particularly sticky issue addressed by this standard was that of "quality of service" (QoS) guarantees (prioritization of certain traffic over the general "best effort" traffic through the network). Providing assurances for certain advertised data rates and levels of reliability can be especially important to real-time applications or services that are particularly latency sensitive. For example, jitter and delay can make streaming video and video telephony maddening or even effectively unusable, therefore necessitating a certain speed and consistency of service. Such QoS enhancements, however, can be abused by broadband providers if only offered to select applications or classes of applications. For instance, if providers of such applications were charged extra to assure the latency levels necessary for them to function, it could create the same worrisome gatekeeper situation for network operators as if they were allowed to block the applications outright. Further, broadband providers could degrade whole classes of applications that compete with their own offerings, such as a phone company throttling VoIP services so as to reduce their desirability relative to their own voice services. We will see in the next chapter how QoS prioritization has been implemented by Comcast as a way of favoring its own streaming video service over other network traffic.

The Order stated that the offering of QoS guarantees would be permissible only when controlled by end-users. Such differential service offerings by network operators could not be based on favoring particular applications or classes of applications; any decision regarding when and what traffic to prioritize had to be made by subscribers to the broadband service and be

available equally for any application or service. Under this rule, a broadband provider could charge an end-user for QoS enhancements to guarantee, for instance, that a certain bandwidth level would be available during peak hours, that Netflix video services stream at a standard rate, or that their general online gaming speeds are satisfactory. A broadband provider would not, however, be able to charge Netflix to guarantee that streaming rate, unless they also charge other video service providers (including their own subsidiaries) the same, nor could they charge online gaming providers for speed assurances if they do not charge other types of application providers for the same quality of service.

Conversely, the specific practices that the order called out as "unreasonable discrimination" follow the same lines outlined above. Discrimination that can be shown to harm end-users, by limiting access or limiting choice, would be found unreasonable. Discrimination that impairs free speech, for instance by degrading traffic specifically based on messages with which network operators disagree, was deemed unreasonable. And discrimination that is anticompetitive, by harming actual or potential competitors to broadband providers— especially relevant to phone and cable companies blocking over-the-top voice and video services— was called unreasonable. Significantly, this enumeration of "unreasonable discrimination" went beyond the mere antitrust standards that broadband providers found acceptable during the policymaking process and specifically named democratic speech harms as a criterion.

These standards for "reasonable discrimination" are generally consistent with the nondiscrimination rule proposed by van Schewick (2012). Her defense of net neutrality principles is primarily based on the end-to-end argument, and the framework for nondiscrimination laid out in the Order was similarly based in these end-to-end principles of application agnosticism and end-user control, in addition to the tenet of "innovation without

permission" that encourages decentralized participation through the removal of gatekeepers (van Schewick 2012). Indeed, the many citations of van Schewick's work throughout the Order suggest that she was the most influential academic net neutrality proponent in the crafting of the rules. Unsurprisingly, then, van Schewick's analysis of the Order was largely supportive of the rules the FCC adopted (2012). She showed that the provisions for "reasonable discrimination" in the nondiscrimination rule did not tip the playing field in favor of any particular user or use of the network, while still allowing the flexibility for broadband providers to offer different products at different markets and manage their networks in necessary ways. She argued that application agnosticism and end-user choice are the factors most responsible for fostering innovation in internet applications and services, and that the Order's "no unreasonable discrimination" rule maintained these in encouraging ways. She also asserted that by expanding from an economics-based antitrust framework alone, the nondiscrimination rule more directly protected important democratic participation and other activities that might not fall easily under the heading of anticompetitive practices or simple consumer harms. Overall, while the Order generally reinforced key values central to the internet's success, van Schewick found that it still left too much uncertainty by leaving so much up to particular case-by-case analysis.

As this rule was not a strict nondiscrimination rule such as those that apply to common carriers (a matter which we have discussed in regard to the classification of broadband and which we will discuss further below in regard to this Order), and given that it did not provide any bright line test to determine the permissibility of particular practices, chances are that the "no unreasonable discrimination" rule would have been applied differently in different cases. This was a change from the NPRM, which proposed a broader nondiscrimination rule. It was narrowed in line with the idea that some forms of traffic differentiation are necessary and even

beneficial.

For each of the above rules, but especially for the "no unreasonable discrimination" standard, enforcement depended on individual complaints. The Order specified the possibility of FCC-initiated actions and encouraged direct negotiations between private parties to resolve disputes, but also set up a complaint system, based on the Commission's steps for cable access complaints, that would have served as the primary means of instigating investigation.[22] Informal complaints could be submitted on the FCC's website as a simple way to draw Commission attention to alleged violations of Open Internet rules. While such informal complaints were a relatively quick and easy way for end-users to assert their rights under the rules, they did not initiate any official enforcement actions. Rather, they were a way for the FCC to track trends and patterns in the way the rules were being followed or not. The Order created an Open Internet Advisory Committee to monitor these issues and the effects of the rules overall.[23] Law and computer science professor Jonathan Zittrain, a prominent proponent of openness for networks, platforms, and devices, was named the chair of the Committee. It includes representatives from corporations in the telecom and online content and service industries, public interest groups, and legal, economics, and technical academics.

However, an FCC investigation into a rule violation would only begin once a formal complaint had been filed with the FCC. These formal complaints were more complex, including fees and administrative procedures that effectively confined their availability to institutional parties like content providers that have access to the resources necessary to undertake such a process, excluding average end-users. The complainant began with the burden of proof to show the rule violation, which the respondent got to defend as "reasonable;" the complainant then had a chance to reply to the "reasonableness" of the respondent's action. The "reasonableness"

factors listed above would be a part of the balancing test to apply on a case-by-case basis in such rulings. This multi-step process provided the flexibility necessary across diverse contexts, but the strength of these protections then depended on consistently and effectively adjudicated investigations and rulings.

It is worth noting here that the nondiscrimination rule did nothing to disallow the standard practice of internet access sold in "service tiers." With these plans, network operators provide broadband access services at different data transfer rates for different prices. This was permissible under the rules because service-based pricing guarantees a particular speed across the board. When a broadband provider charges a monthly fee for internet access, for example, it promises a bit rate of 10 Mbps for access to the whole internet and for access to all applications and services available on the network, chosen by the end-user. These service tiers are distinguishable from "access tiers," where broadband providers could sell internet access service that includes access to only a select set of online sites and services— for instance, broadband providers differentiating their products based on access to Hulu but not YouTube or having to pay broadband providers an additional fee to use Skype. This is the hypothetical practice outlawed by the "no-blocking" rule. Service tiers are also distinct from "usage tiers," the increasingly standard practice where internet access services are sold with limits placed on the total amount of data a subscriber can use— for instance, Comcast's 250 GB per month data cap. This practice and its implications under these rules will be discussed further in Chapter 6. This nondiscrimination rule, in addition to the other two, remained tempered by a large exception.

"Reasonable network management" exception

All three main rules of the Open Internet Order— transparency, no-blocking, and nondiscrimination— were subject to exceptions for "reasonable network management." The

principle is defined this way:

> A network management practice is reasonable if it is appropriate and tailored to achieving a legitimate network management purpose, taking into account the particular network architecture and technology of the broadband Internet access service.[24]

The Order stated that this exception was intended to balance clarity with flexibility: broadband providers were allowed to block, prioritize, and degrade traffic on their networks in ways that went against the rules so long as those practices were appropriate and tailored to the legitimate needs of running the networks.[25] Network operators were free to employ such practices as they saw fit without any prior permission, although if they desired clarity before taking network management actions they could seek a declaratory ruling from the FCC. As a clarifying note, the Order specified that the phrase "particular network architecture and technology" referred specifically to differences across internet access networks. As such, it acknowledged that some practices that may be reasonable, for instance, to manage a cable or DSL network would not be appropriate for a fixed wireless network.

The Order provided a list of some "legitimate network management purposes."[26] This included ensuring the security and integrity of the network by blocking or degrading traffic deemed harmful to the network, such as spam, malware, or DDoS attacks. It also included addressing traffic unwanted by end-users, which included coffee shops, libraries, and other end-users who provide internet access to other users on their premises. Examples of this include schools blocking their students' access to pornography and consumers installing parental controls on their home networks.

The Order further listed reducing or mitigating the effects of congestion on the network as an example of a legitimate network management purpose. Congestion is likely to be a continuing issue to be managed, so deciding what techniques are acceptable for network operators to deal with it is especially important. Congestion is a longstanding and ongoing reality on the internet

due to its existence as a shared infrastructure supporting a wide diversity of users and uses, as shown by network engineers Steven Bauer, David Clark, and William Lehr (2009). Even expansion of network capacity is not enough on its own to eliminate congestion, they find, because the technical design of packet switching drives data speeds to their limit, whatever that is, and the exponential pace of internet innovation and usage suggests that user demand is likely to continually outstrip available bandwidth supply, no matter how much. Rather than thinking of congestion as a condition to be eliminated, Bauer, Clark, and Lehr argue, it should be seen as a complex question of resource allocation.

Which techniques for congestion management are considered best has evoked a spirited debate in the technical community as the technological means and industry norms for intervening in the flow of internet traffic have changed. Under the traditional "best effort" design of the Transmission Control Protocol (which, with the Internet Protocol, makes up the foundational technical structure of the internet: TCP/IP), congestion is managed according to "flow-based fairness," a simple system that drops packets if there is not room for them to be received. Historically, then, congestion was dealt with at the edges of the network and in an "all bits are created equal" fashion. Developments in technologies at the core of the network, however, have allowed network operators to more actively and selectively manage this flow. Technologies like deep packet inspection afford network operators the ability to single out particular types of traffic for prioritization or degradation. As discussed above, the rules do specifically discount the reasonableness of application-specific methods of network management, adding that transparency and end-user control are additional benchmarks, which limits network operator's ability to employ these methods. Additional nontechnical means to restrict traffic with the pretext of congestion management have also been increasingly used by broadband providers, such as

limitations on overall network speeds and data usage through means such as data caps.

Bauer, Clark, and Lehr conspicuously do not take a position on these alternative traffic management techniques. They instead offer cautions toward both sides of the net neutrality debate: they express concern over the potential for abuse of active traffic management to the detriment of the open internet, but they also warn against dealing with congestion in ways that might discourage innovations at the core of the network (2009: 32). Like most in the technical community, they shy away from explicit endorsements or denunciations. This is an interesting line to walk, however, considering that Clark is one of the inventors of the end-to-end argument that emphasizes control at the edges of the network over control at the core. It is worth noting here that Clark was named vice chair of the Open Internet Advisory Committee created by the Order and tasked with evaluating the reasonableness of network management practices. As such, the interpretation of this standard by that committee would likely attempt to achieve this just the sort of balance that Clark's publication does.

This question of congestion management has been widely discussed in net neutrality debates, largely due to the role it played in the *Comcast* case that set the terms for the Open Internet rulemaking.[27] To review what we saw in Chapter 3 about the case, Comcast defended its decision to block and degrade traffic from BitTorrent on the grounds that it was reasonable network management to address congestion, justified by the heavy bandwidth load generated by the application. Significantly, since the resolution of that case (and actually before that proceeding was even finished), Comcast abandoned this application-bias-based strategy for congestion management and adopted an application agnostic approach to network management more in line with the model for "reasonable discrimination" outlined in the Order.

How "reasonable network management" was defined was a particularly heated part of the

policymaking process and it remains a controversial provision of the FCC Open Internet policy. This is not surprising because, defined broadly, it represents a very prominent loophole through which network operators can pass a wide variety of traffic interference. The exception as defined in the Order was broader than its application in the FCC's action against Comcast: there, reasonable network management had to be "narrowly or carefully tailored" to a legitimate network management purpose.[28] Due in large part to the influence of AT&T, the standard was no longer a strict test and became much more vague.[29] Leaving the definition nebulous played into the hands of broadband providers because they have enough lawyers and economists necessary to make potentially any practice look "reasonable" to the FCC, especially if facing off against a fledging online startup or an underfunded nonprofit advocacy group. This left the practical scope of reasonable network management unpredictable and potentially expansive to include discriminatory behaviors that can have real harm to users. This harm can happen regardless of if the motivation for the discrimination is network management or not. An exception perhaps even larger than "reasonable network management" was the inapplicability of the rules to wireless networks.

Wireless broadband exceptions

Mobile broadband internet access services were given a separate set of rules from fixed broadband. These rules applied to access to the internet via mobile devices like smartphones and tablets (as distinguished from internet access at home via a wire or cable) provided by cellular network operators, some of whom, like AT&T and Verizon, also provide fixed broadband services. Although it conceded that the same rationales for openness protections that exist for fixed broadband exist for mobile broadband, the Order mounted an argument that the case of

mobile broadband necessitates special considerations and differential treatment, and hence a separate set of regulations were required. This argument was based on the notion that mobile broadband networks were still at an early stage of development compared to fixed broadband and were evolving rapidly. As such, the Order took "measured steps" toward these services, exempting mobile broadband providers from most of the rules discussed above.[30] There were two rules that apply specifically to mobile broadband service.

The first rule was that mobile broadband providers had to be transparent in their network management practices, performance characteristics, and terms and conditions. This was essentially the same transparency rule that applied to fixed broadband. The only difference was that mobile network operators also had to disclose information explaining their process for deciding what third-party devices and applications are allowed on their networks.[31] This additional transparency condition was related to the fact that mobile broadband providers were exempted from the prohibition on blocking devices and application on their networks. Here the Order did not extend the openness conditions attached by the FCC to some wireless spectrum licenses that require the mobile network operators to allow all third-party devices and applications, which will be discussed in more detail below. Under this rule, mobile network operators could block access to certain resources but they had to be transparent about how and why, so that users and content providers could make informed decisions, which left some market discipline to provide incentives to avoid abusive practices.

As with the transparency requirement for fixed broadband discussed above, mandatory disclosure of blocking is not enough on its own to adequately protect openness. If mobile providers could see to it that certain apps are simply not available, end-users must be aware that these apps even exist in the first place in order to notice that they are inaccessible on their mobile

service. The fact that notice would be given on the network operator's website is not helpful in this case because in order to find this information end-users would have to go out of their way to seek this information out and the average user is not likely to know about it otherwise. Information about what is being blocked is more likely to reach users from advocacy groups actively monitoring the activities of network operators, publicizing abuses, and filing complaints on users' behalf. Posting explanations for blocking on a website can be helpful in this process, but is no substitute for the vigilance of user advocates.

The second rule was that mobile broadband providers could not block lawful websites or competing applications. The rule reads:

> A person engaged in the provision of mobile broadband Internet access service, insofar as such person is so engaged, shall not block consumers from accessing lawful websites, subject to reasonable network management; nor shall such person block applications that compete with the provider's voice or video telephony services, subject to reasonable network management.[32]

This exempted mobile broadband from the broader no-blocking rule that applied to fixed broadband as discussed above, where those providers had to provide access to all lawful content, services, applications, and devices. This narrower no-blocking rule for mobile broadband was targeted to protect only sites and services on the web and apps that compete with mobile network operators' legacy telephony services. It also contained the same qualifier of "lawful" as the equivalent rule for fixed broadband, which raises the same issues discussed above in that regard.

The Order justified its exclusive protection of the mobile web over other mobile applications by noting that the mobile web is more advanced in its development and more directly equivalent to the web available via fixed broadband access than are other apps— that is, regulating web access for wired but not wireless would be a more obvious contradiction than with other network applications.[33] Therefore, the Order argued, the mobile web comes with the

same expectations of openness that the broader web does and does not present the same complex network management issues as other apps and services. Not only was declining to protect the openness of other mobile apps and services regrettable, but doing so with such a justification as this was especially troubling.

The logic in the Order's argument on mobile broadband was circular. It rejected openness requirements for newer mobile apps and services on the grounds that they do not have the history and norms of openness that the web does, but that does not mean that those norms should not be implemented for the future of mobile apps. Indeed, it makes no sense for the Order to say that openness should not be protected on mobile broadband because openness is not as well-established on mobile broadband— if anything, this reasoning supports requiring openness for mobile in the same way as on fixed broadband. In fact, part of the reason why other mobile services do not carry the same expectation of openness as the web is that mobile apps and services have been closed down by network operators and software developers since the inception of mobile broadband in the mid 2000s, in the absence of the openness protections such as common carriage regulation and open access requirements that were in place for internet infrastructures during the development of the web.

Further, this argument betrays a slippage between openness at different layers of the network. Mobile apps are often designed by developers to be closed in the sense that they are typically limited to use of the particular content or service offered within the app itself, as opposed to the openness of web browsers, which allow users to access anything on the web. For example, the *New York Times* app on the iPhone presents content owned by the newspaper; on the other hand, the Safari web browser app on the iPhone provides access to any content available on the web, including the content presented on nytimes.com but also content from any

other website. Typical mobile apps, though, including the *Times* app from this example, now include limited feature web browsers within the app for users to be able to follow links in the content that is presented but which also allow users to navigate elsewhere on the web. Meanwhile, the mobile website for content providers like the *Times* who also have mobile apps now tend to come with banners encouraging users to download the app instead.

This open or closed design at the level of the application is not the same thing as the openness or enclosure of the internet itself, however, which is the concern of the FCC's Open Internet rules. That is, the norms of mobile software design are not related to the network management practices of mobile network operators— one concerns access within an application, the other access on the whole network. The closed design of most mobile applications means that smartphone and tablet users typically find themselves using one particular app for one particular online service or type of content— for instance, posting to Facebook from the Facebook app while listening to a Pandora internet radio station from the Pandora app. If this user cannot get to her Facebook newsfeed from within the Pandora app, this is does not prevent her from accessing that content; it just means that she has to switch apps on her phone to do so. This is different from a closed network, where a mobile provider has the power to decide what content is accessible not just within one particular app, but to any of the apps on the network. This also extends to what applications are available to use at all, which we will discuss below in regard to closed app stores.

Even if we accept the mobile design ethos of optimizing certain apps for certain content, the choice of what content is accessible to any particular application should be made by users and by app developers, not network operators. Under the weak no-blocking rule in the Order, mobile broadband providers were able to make this choice for users and developers by blocking

any content or service, so long as it is not accessible through the open web— anything not reached through a web browser, that is— which amounts to a tremendous amount of what users do on the internet on smartphones and tablets. Conversely, it is unclear why the norms of closed mobile software design should influence the standards applied to mobile broadband networks, as the Order implies. If the Order seeks to protect the openness of the internet, why, on the new frontier of the internet that is mobile broadband, would it not extend to new mobile apps just those openness conventions that made the web the foremost example of openness's success? Instead of this, the Order chose to merely shore up openness on the mobile web from the wave of limitations and restrictions rising from other mobile apps, rather than address this closing trend by encouraging the opening up of mobile apps.

The Order explained its ban on blocking rival telephony apps as a straightforward case of preventing anticompetitive behavior. Mobile network operators' primary business at that point remained selling cellular telephony service, so they have strong incentives to unfairly insulate these legacy profits from new competition from VoIP services. Over-the-top voice services such as Skype and Vonage allow users to place calls through mobile broadband access to the internet, allowing them to circumvent the higher-cost use of the traditional cell phone networks operated by mobile providers. The Order cited examples of blocked access to over-the-top voice services— Skype in particular had frequently encountered access disputes with mobile providers— and raised concerns that mobile network operators would further abuse their bottleneck position in between these apps and their potential users in ways that harm these potentially disruptive newcomers.[34] The Order specifically extended this protection against blocking to video telephony services, like Apple FaceTime and Google Hangouts, which have not only substitutional but also supplemental effects for traditional telephone calls. As we will

see in the next chapter, however, AT&T blocked FaceTime for users of its mobile broadband network who were grandfathered in to its now defunct unlimited data plans. Additionally, as with the broader no-blocking rule for fixed broadband, degrading these services to the point of them being effectively unusable counted as blocking. An important difference as applied to mobile, however, was that, without a nondiscrimination rule to back up video telephony protections, as there was for fixed broadband, mobile providers were left able to de-prioritize such competing services relative to other traffic as acceptable under the rule.

Also notable in this no-blocking rule for competing apps was what it did not say. It was very narrow in protecting only voice and video telephony services, even though there are other mobile apps that compete directly with mobile network operator's own offerings. For instance, the rules do not mention mobile instant messaging services. Mobile internet messaging services like WhatsApp and iMessage on the iPhone offer users the ability to send unlimited text and multimedia messages on their smartphones over-the-top on the internet and cut into the market for paid plans for traditional text messaging through cellular networks. These services directly compete with mobile network operators and remained vulnerable to blocking under these rules. Also, in only specifically naming video telephony services for protection, this rule left unprotected other video services that compete with mobile network operators. This applied in particular to AT&T and Verizon, the two mobile broadband providers who are horizontally integrated in networking: these two corporations operate networks for mobile voice and broadband internet, fixed broadband internet, multichannel television distribution, and traditional landline telephony. AT&T's U-verse and Verizon's FiOS fiber optic networks both include broadband video services (a type of 'specialized service' that will be discussed below) that compete with over-the-top broadband internet video services like Netflix, Hulu, and YouTube.

Even though U-verse and FiOS video services are offered only over fixed broadband networks, video services like Netflix, Hulu, and YouTube offer apps for AT&T and Verizon's mobile broadband networks. Under this rule, it is far from clear whether these mobile operators could block these competing video apps— they compete with services offered on the two companies' fixed broadband networks, but not on mobile (Leghart 2011). Leaving this door open through such ambiguity is a weakness of limiting the no-blocking rule on wireless to only competing services, which does not do enough to protect innovative competing services in the video area.

Notably, this ban on blocking competing apps was not applied to the operation of app stores.[35] Mobile network operators could decide what to make available in the application marketplaces where users download apps on their mobile devices. The Order brought up the fact that the app stores run by mobile broadband providers compete with the app stores of device manufacturers and OS developers like the Apple App Store and the Google Play Store that dominate the market for app distribution, although OS-based app stores are not available on competing platforms (e.g., a user cannot download Android apps from the Google Play Store onto an iPhone). The Order reasoned that it would be unfair to subject mobile network operators to rules that mandate they carry any app in their store if OS-based app stores have no similar requirement. Operating an app store also brings with it expectations of curatorial control, the Order said, so any party with an app store should be free to pick and choose what apps to include. Similar to the circular logic applied to the openness of the mobile web over other mobile apps, though, the Order here made a curious argument that app stores should not be open because they have not been open, rather than consider the merits of openness for app stores on its own. Indeed, from the reasoning above, why would it not follow that the fair thing to do would be to apply openness requirements to all app stores, regardless of who operates each one? This seems

especially sensible given that universal access to apps is protected on fixed broadband, where apps can be installed in a variety of ways onto personal computers, but that app stores serve as much more of a bottleneck for mobile broadband, where typically apps can only be installed on mobile devices by downloading from a small handful of closely controlled app stores.

This app store gatekeeper position has been abused in ways troubling for both free expression and competition. Apple in particular provides many prominent examples of this, consistent with its penchant for tightly managed walled garden environments. Apple has denied such content as political cartoon apps for "ridiculing public figures," newspaper apps for featuring the "Page Three girls" typical of British tabloids, ebook apps for providing access to the Kama Sutra, and for apps about US drone strikes and a single-payer health care system for being "objectionable."[36] Anticompetitive practices from mobile providers have also played into the blocking of mobile apps, such as AT&T pressuring Apple to block VoIP apps such as Google Voice and Skype that compete with its cellular voice services.[37] AT&T and Verizon have also both blocked free tethering apps that compete with their paid tethering services, which allow users to create small wireless networks with their mobile devices that they can use to connect their laptops to the internet via mobile broadband. Allowing these practices to continue in mobile app stores, regardless of who operates them, undermined the openness that the Order sought to institute.

The Order strained to justify its differential treatment of mobile broadband in comparison to fixed broadband. The Order explained this position with a series of rationalizations from a number of angles. However, it failed to make a persuasive argument that blocking and discrimination should be allowed for the former while not for latter.

First, the Order noted that the market for mobile broadband internet access has been more

competitive than for fixed broadband.[38] While most end-users in the US have only a choice between one phone company and one cable company to obtain broadband internet access in their area, they have more choices when it comes to cellular service companies that provide mobile broadband access. The mobile industry in the US is led by AT&T and Verizon, while T-Mobile and Sprint remain competitive— however, the former two dominate the market with their more comprehensive nationwide networks and the current trajectory is toward further consolidation, represented by AT&T's attempted takeover of T-Mobile in 2011 and the rumored merger between T-Mobile and Sprint at the time of this writing. The Order argued that this is greater choice, which means that transparency alone can be enough to discourage abusive practices by mobile providers because if users disagree with the way their mobile provider manages its network they can just switch to another carrier. The rebuttals to this transparency argument traced above, however, apply even to this slightly more competitive market. Even if more carrier options exist, the release of disclosures does not speak to the actual likelihood that users will encounter this information and understand the consequences of the network management practices in question and, even so, this does not diminish the high switching costs that exist in the form of early termination fees, the time and hassle it takes to cancel one service and begin another one, and other discouraging factors. Further, the reason AT&T and Verizon dominate the market in the first place is the lack of network coverage in particular regions of the US by their competitors, which would continue to discourage switching away from these two largest carriers.

Second, the Order brought up the lower speed, capacity, and penetration rate of current mobile broadband networks at that time.[39] Mobile broadband networks are not far enough along in their development to put such rules on them, according to this line of thinking. The Order did not make clear why this should serve as reason to avoid openness regulations on these nascent

services— indeed, if the structures and practices of these systems are still emerging, why is that not reason to establish early on the openness of users and uses that was associated with the development of fixed broadband as a platform of wide participation, expression, and innovation? Rather, implied in the Order's logic is the assumption that regulations would serve as constraints to the growth of these services— the familiar deregulation defense straight from the corporate gospel of neoliberal ideology. The unspoken assumption evident here, that regulation kills economic growth, is dubious at best, in this context or any.

Indeed, the Order itself even explicitly refuted the assumption that the regulations it contained would do economic harm. In fact, it goes to great lengths to make the case that openness requirements on broadband network operators would actually increase investment and innovation that would further speed, capacity, and penetration of networks, including mobile.[40] The Order emphasized throughout its text the "virtuous cycle of innovation" that has driven the growth of the internet: new content, services, applications, and devices increase end-user demand for broadband internet access, which encourages broadband providers to improve their networks, in turn leading to more new uses of the network and the reiteration of the cycle. It follows, then, that these regulations— rules to ensure access to the new content, services, applications, and devices that drive demand for broadband— would actually enable and not constrain network expansion, including mobile broadband. It makes no sense that the Order prominently features this as reasoning behind adopting these rules but denies its logic in the context of mobile broadband (Leghart 2011).

Third, the Order cites "operational constraints" that come with relying on wireless spectrum to deliver broadband service.[41] The electromagnetic spectrum has natural limitations as a medium for carrying internet traffic that wires and cables do not. This, combined with the rapid

rise of smartphones and tablets and bandwidth intensive uses of them, such as streaming video, combines to present unique congestion issues for mobile broadband providers. This so-called "spectrum crunch," the Order asserted, therefore entitles mobile broadband providers to a wider berth for "reasonable network management." However, as detailed above, the management of congestion is no excuse for blocking or degrading traffic for being bandwidth intensive or for any other reason, such as interfering with services like streaming video as was allowed under these mobile rules, as application agnostic methods of alleviating network management work just as well to deal with problems. Even so, this widely touted "spectrum crisis" has been overplayed by mobile network operators in an effort to encourage the FCC to auction more spectrum and remove regulations on its use. Some analysts say that the increasing rate of mobile data usage has actually been exaggerated by network operators and is perhaps even slowing down now that data caps have become the norm with mobile broadband.[42] Data caps and their consequences for the open internet are considered further in Chapter 6.

Regardless of the amount of mobile broadband traffic, the answer to mobile broadband congestion should not be restrictions on users but a more efficient use of wireless spectrum. The FCC's spectrum frequency allocation system does little to encourage operators' efficient use of the airwaves over which they are given exclusive control.[43] Indeed, the incentives are for the incumbent broadcasters and mobile carriers who hold wireless licenses to hoard spectrum in order to lock out competitors.[44] For instance, at the same time as they cite a lack of capacity as necessitating closed control over their users to manage their mobile broadband network, and push for the FCC to auction more licensed frequencies for it to buy, Verizon left a huge swath of its spectrum undeveloped for years.[45] Further, the very idea of wireless spectrum being a scarce resource is an outdated concept: for decades smart antenna technologies have existed that make it

possible for multiple signals to be transmitted over the same frequencies of spectrum, leaving many prominent legal and telecommunications scholars to call strongly for the FCC to either open up more spectrum for unlicensed use or do away with spectrum frequency licensing altogether (Benkler 1998, Sandvig 2011, Streeter 1996, Lessig 2001). As shown by the success of Wi-Fi, Bluetooth, and other innovative technologies that make use of shared open spectrum, FCC spectrum frequency licenses are not only unnecessary for the functioning of wireless usage but also highly inefficient. There is no need to allocate one chunk of spectrum to one particular operator for its exclusive control when shared spectrum technologies can transmit signals across the same frequency and allow expanded open access to this important publicly owned communications medium.

Fourth, the Order mentioned that openness requirements already apply to some mobile broadband networks. Namely, the 4G LTE network operated by Verizon in the 700 MHz "C Block" of wireless spectrum must allow any third-party devices (including unlocked, or "jailbroken," smartphones) and apps (including in app stores) as a condition of the license it won for this spectrum at FCC auction in 2008.[46] This openness requirement was the result of the calculated effort by Google to push for open access to wireless spectrum and encourage net neutrality on mobile broadband networks, as discussed in Chapter 4. This was to counter the practices typical of cellular networks during the 'feature phone' era, prior to the rise of smartphones in the late 2000s, when mobile broadband was only accessible in tightly controlled ways, with only 'certified' apps and services allowed and only handsets through exclusive contracts between network operators and device manufacturer. The FCC did not adopt the full net neutrality and open access requirements that Google proposed, but it did attach the "no locking or blocking" rules for devices and apps to the C Block spectrum license in exchange for

Google's minimum $4.6 billion bid.[47] Verizon won the C Block auction and became subject to these openness requirements.[48]

The openness requirements on Verizon's C Block spectrum are stronger than the rules for mobile broadband adopted in the Open Internet Order. While Google instigated this, the FCC did see fit to put forward those regulations at that time. Further, these openness requirements were discussed in the Order as bringing about positive outcomes for the future development of the mobile broadband network subject to them.[49] However, given the opportunity in the Order to extend these conditions to the rest of the mobile broadband market, the FCC stopped short of instituting rules nearly that strong. If stronger openness protections were good for one, why were they not good for all? The Order provided no adequate explanation for this. Rather, it presented these requirements on Verizon as a sort of experiment in openness, the results of which would be studied in the future to determine their success or failure and the need to expand them or retract them.

This wait-and-see approach is consistent with the Order's consideration of mobile broadband generally. Stating that it wished to observe the development of the mobile broadband market further before imposing more openness rules upon it, the Order said that the FCC would continue to monitor the openness of mobile networks and its relation to the rules it instituted there.[50] The issues the Order specified would be monitored moving forward include the effect of the rules and market developments, the conduct of mobile broadband providers in regard to limiting openness, and differences that arise between mobile and fixed broadband.[51] One particularly worrisome issue related to the divergent treatment of these two forms of broadband access is the lack of strong openness protections for users whose primary or only access to the internet is through mobile broadband, a population which is disproportionately made up of low-

income populations and people of color. The implications of a closed mobile environment in contributing to a 'mobile divide'— a new and growing 'digital divide' between those with only limited mobile internet access and the rest of internet users— have been discussed in Chapter 4 and will also come in Chapter 6. The Order did, however, reserve the right to adjust the framework for mobile broadband regulations it set up based on what it sees in this regard.[52]

While the hesitancy to extend to mobile broadband the same openness protections that fixed broadband enjoyed under these rules was disappointing, it is encouraging that the Order clearly established a threat of regulation that could work to keep network operators somewhat in line nonetheless. The Order stated that its proceeding incrementally in regard to mobile broadband should not be taken as an implicit approval of behavior by mobile network operators that would be counter to the general principles of openness.[53] According to the Order, in its monitoring of the activities of mobile broadband providers, the FCC would pay particular attention to network management practices that would be impermissible under the more stringent rules that apply to fixed broadband. That is, while it may be legal for a mobile network operator to block or unreasonably discriminate against particular traffic on its network under the Order's regulations, those practices would still violate the net neutrality principles that inform the Open Internet protections generally and their broader application in the fixed rules. Therefore, the degree to which such closing conduct occurs and has observable effects for expression and innovation on mobile networks would determine the FCC's willingness to expand further openness protections to mobile broadband.

The Order clearly counted on this warning to act as a deterrent to bad behavior by mobile network operators and threatened regulation has motivated self-regulation in media industries historically (e.g., the film industry's ratings system). However, the effectiveness of this approach

depends on following through with the close monitoring that was promised— for end-users, under the complaint system discussed earlier, this put the onus on public interest advocates to be vigilant. Further, by the time any negative effects from this permissible but undesirable behavior would be established, it may be too late to stop the consequences of a closed network environment. Indeed, the Order elsewhere touts the necessity of establishing prophylactic openness regulations to curb the effects of closed network management practices before they can become widespread, but apparently did not see the need for such preventative measures to head off the activities that it stated its opposition to for fledgling mobile networks.[54] As we will see in Chapter 6, none of this did enough to stop the abusive network management practices that the Order stated it was concerned with in the aftermath of its enactment.

All of these issues raised by the disparity between the openness protections for mobile and for fixed broadband are compacted by the likelihood that mobile broadband will soon become the dominant means to access the internet. With the rapid rise in the use of mobile devices like smartphones and tablets and the steady expansion in the speed and capacity of next-generation mobile broadband networks, the internet access service market is clearly moving toward mobile. As more and more of what users do on the internet is done on mobile devices, the lack of strong openness protections for mobile networks becomes all the more significant.

The analysis above has shown how the broadband access regulations adopted by the FCC in the 2010 Open Internet rules were a deeply compromised set of protections that fell short of what is necessary to implement the principle of network neutrality in a meaningful and sustainable manner. To truly understand the meaning and impact of these rules, though, we must see them in light of the Commission's accompanying inaction in regard to reclassification of broadband. We will now look at the FCC's failed reclassification plan and the debate

surrounding it.

Reclassification and "the Third Way" not taken

In the wake of the *Verizon* decision in January 2014, issued shortly before this writing, the FCC and those in the surrounding policy sphere were embroiled in a heated debate about how to proceed with these Open Internet regulations. To those who remained committed to implementing enforceable net neutrality policy— and it was unclear at this point who at the FCC was included in this— a consensus had largely been reached: the Commission should reclassify broadband as a telecommunications service. For Open Internet regulations to stand up under legal scrutiny, it is necessary for them to be based in the legal framework of Title II: as the DC Circuit made plain in the *Verizon* case, the trouble is not with net neutrality, but with the legal inconsistency of net neutrality disconnected from the regulatory tradition of common carriage under Title II. Remedying this problem would take the FCC changing its definition of broadband— applying to it the label 'telecommunications' rather than 'information.' Something seemingly this simple is not easy, however. To understand the ongoing political struggle within this discourse at the FCC— and the likely escalating war over the use of this terminology to come after the time of this writing— we must look back to the earlier battle over changing the definition of broadband. In 2010, shortly before adopting the Open Internet Order, the FCC came tantalizingly close to reclassifying broadband to a telecommunications service, but backed down before making the move. In short, network operators made reclassification a much more arduous task than Chairman Genachowski was willing to take on, and the Commission chose political expediency over a solid foundation for net neutrality policy.

Following the *Comcast* decision in 2010, it became painfully clear that the FCC's entire broadband agenda, and perhaps its relevance in the digital era altogether, was in jeopardy. As

discussed in Chapter 3, the court denied the Commission's authority to regulate broadband, a finding that followed from the FCC's earlier decisions to classify broadband under Title I, where the agency has little regulatory oversight. At this point, the FCC found itself a bit like Wile E. Coyote, having run off the cliff long ago but only then realizing it had no ground underneath it. The FCC had been operating under the assumption that its existing legal framework for broadband would be enough to support its Open Internet rules— which it was finally getting close to reaching agreement on at that point. The DC Circuit's ruling came just as the FCC was convening the backroom negotiations that would culminate in the Googizon legislative framework discussed in Chapter 4. Just as the FCC thought that the debate over the Open Internet rules might be working toward some sort of conclusion, it came to the realization that the whole thing might be for naught unless it could find a way to make the underlying legal structure work.

The most obvious answer to the FCC's conundrum was simply to reclassify broadband as a telecommunications service. If the problem at the heart of the *Comcast* case that would haunt any FCC broadband regulation was broadband being slotted into the Commission's limited authority under Title I, it makes the most sense to simply slot it in under its more direct authority under Title II. The logic behind this is more than merely an instrumentalist need for a more sustainable framework for net neutrality policy: as discussed in Chapter 3, both the history of the FCC's prior definitions and the technological realities of internet access infrastructures are more consistent with defining broadband as a telecommunications service than as an information service.

The call for reclassification was loud and clear from the media reform advocates most engaged with the Open Internet proceeding. Indeed, Public Knowledge actually submitted a

proposal to reclassify broadband even before the *Comcast* decision was handed down.[55] Its prescient plan foresaw the problems to come for net neutrality policy and the most relevant solution. In its proposal, Public Knowledge laid out two paths for reclassification that the Commission could go down. The first path is to take broadband internet access service as it exists now— which, as discussed above, is as a bundle of both telecommunications and information services— and classify the whole thing as a telecommunications service under Title II.[56] This would work because, as we saw above, internet access is essentially a two-way transmission service definitive of telecommunications, even if it is bundled with information services like DNS translation, web hosting, or some specialized managed service. As Public Knowledge pointed out, any doubt that connectivity is the predominant portion of the service can be dissolved with a quick look at any advertisement for broadband service: the product being offered is primarily access to the internet and broadband providers compete principally on the basis of speed and price of transmission, indicating the separable value of the connectivity on its own.[57] The second path is to separate the telecommunications and information components of broadband and classify the former under Title II and the latter under Title I.[58] This makes sense in the way it would draw on FCC precedent: as discussed above, the FCC regulated the telecommunications and information components of internet access services separately prior to 2005, when the Supreme Court gave the Commission a green light to throw out this regulatory approach in the *Brand X* case. Notwithstanding the Supreme Court's deference to the FCC, both the Court and the Commission formally recognized that broadband is made up of both telecommunications and information components, leaving the door open to regulate each on its own terms— an approach that, as we saw above, ensured openness and competition in internet access that has since gone away. Either path would put necessary broadband policy like net

neutrality on the more firm legal ground of Title II and would bring essential common carriage protections back to internet infrastructures.[59]

With the FCC backed into a corner on the authority question, plans for reclassification actually gained some headway. This progress was spurred on by public pressure put on the Commission: as discussed in Chapter 4, reclassification became an unlikely rallying cry for citizen participation channeled by media advocacy groups like Free Press. Although it was expected to be a contentious issue, a tremendous pushback from the telecom industry was sparked by the mere discussion of reclassification.

With network operators threatening to escalate the net neutrality battle into a legal World War III in the communications policy world, the FCC reclassifying broadband quickly became known in telecom circles as "the nuclear option."[60] This characterization came out of discourse from the phone and cable companies who framed common carriage regulation of broadband as a radical move. A seminal point in this network operators' discourse surrounding the reclassification debate was a letter sent to the FCC in the Open Internet proceeding signed by AT&T, Verizon, Time Warner Cable, the NCTA (the cable industry trade group), the CTIA (the wireless industry trade group), and other telecom companies and associations.[61] In the letter, the network operators argued against the regulation of broadband providers as common carriers and the feasibility of any attempt to reclassify them as telecommunications carriers that that would take. Their argument remained consistent with that of cable operators as traced in Chapter 3— namely that broadband is entirely an information service with no separable telecommunications component to regulate as such— which remained inconsistent with technological and historical realities. This reality is that there is necessarily a basic underlying infrastructure to internet access service regardless of the definition that broadband providers prefer, that the information

processing components of internet access service remain secondary in necessity to providing internet access service and even in use, and that that underlying infrastructure has historically been regulated as common carriage by the FCC, with successful results in the early days of the internet. What is most notable about this letter from network operators is its overheated rhetoric, indicative of their upping the ante in the reclassification fight and the continued power of their misrepresentations in policy discourse.

Network operators cast common carriage as old and outdated regulation inappropriate to apply to the high-tech networks of today. They decried any attempt to "impose common carrier rules, designed for the monopoly telephone companies of 1934, on the competitive broadband industry of today."[62] Never mind the fact that the broadband market is far from competitive, as discussed above; here let us take issue with the fact that common carriage rules were not designed for monopoly telephone companies. As we saw in the history of common carriage as a regulatory principle detailed in Chapter 3, while it is true that common carriage regulation is old, that is more an indication of its long-standing, time-tested nature as a bedrock principle for communications policy. That is, common carriage is a general rule designed for any privately-owned public network of transportation or communication that is imbued with public obligations, not just telephone companies and not just those with monopoly control.

Network operators further characterized common carriage as heavy-handed regulation sure to smother broadband services. Trying to contrast Genachowski's stated aim to not overburden broadband providers with a representation of common carriage as investment-killing government intervention, the letter stated: "It is difficult to imagine a proposal more at odds with the Commission's historical commitment to keeping the Internet unregulated, to our national prospects for economic recovery, and to [Genachowski's] own commitment to 'common sense'

solutions and to 'private enterprise, the indispensable engine of economic growth.'"[63] The letter reeled off a litany of catastrophes sure to follow the reclassification of broadband. "Indeed, the Commission cannot seriously think that layering a 75-year-old regulatory structure on modern broadband facilities will not harm current and future levels of broadband investment," the letter read, "This concern is especially acute given that this antiquated regulatory structure would require all providers to divert time and resources from deploying broadband networks so that they can design and implement the myriad systems and processes necessary to comply with a bevy of newly imposed Title II obligations and requirements."[64] Hitting hard on this point as broadband providers did any time reclassification came up was a gross, and surely willful, misunderstanding of the reclassification proposals under debate. Even media reform advocates' plans for reclassification made clear that applying the whole slate of rules that telephone services are subject to is unnecessary and inadvisable.[65] Under a regulatory technique known as 'forbearance,' the FCC has the ability to apply only those provisions that it sees fit under any given classification, meaning that classifying broadband as a telecommunications service does not require the Commission to treat it exactly the same as any other telecommunications service. In other words, reclassification does not bring with it a whole host of burdensome obligations and requirements that were designed for phone service only to be ill fitted to broadband service.

It was into this acrimonious atmosphere that the FCC released a proposal for reclassification— a reasonable plan with much promise to actually address the underlying troubles with enforceable net neutrality policy. In a speech on May 6, 2010, Chairman Genachowski introduced what he called "The Third Way" to approach broadband regulation, a general announcement accompanied by a more detailed legal analysis authored by FCC General Counsel Austin Schlick.[66] In answering the question of how to proceed following what it referred

to as "the *Comcast* dilemma," the Third Way was meant to be a moderate middle path in between leaving broadband regulation on the shaky foundation of Title I on the one hand— what it referred to as the "Stay the Course" plan— and reclassifying broadband with all of the Title II regulations on the other hand— what it referred to as the "Telephone Style Regulation of Broadband" plan.[67] Using forbearance to "narrowly tailor" a common carriage approach to broadband was the core of the Third Way plan: Genachowski proposed separating the transmission component of broadband and classifying it as a telecommunications service, applying a few core common carriage rules to broadband transmissions, and forbearing from the rest of Title II.[68]

The first step of the Third Way's plan was for the FCC to recognize the basic infrastructure portion of broadband as a separate service. This would mean officially renouncing its prior decision to define broadband as a single integrated service of both conduit and content, as detailed in Chapter 3. This would not be unreasonable because it would merely be a return to the framework that existed prior to 2002 of regulating the infrastructure and content of internet access services separately. As discussed above, the Cable Modem Order of 2002 that defined broadband as an information service was a stark break with this precedent. The Supreme Court, in the 2005 *Brand X* case, did not endorse the FCC's move, but merely deferred to the Commission's decision as one of several permissible ways of handling the issue.[69] Indeed, the strong dissent authored by Justice Scalia found that the separation of infrastructure and content called for in the Third Way was the only reasonable way to proceed.[70]

Once the transmission and content components of broadband were separated in the FCC's definition of broadband, the second step would be to classify the transmission component as a telecommunications service. The technological functions necessary to carry user data to the

internet and back would be the only services subject to reclassification. Drawing the line between this basic connectivity and the provision of information on the network would be a matter of defining the practical role of particular technological functions in providing broadband internet access.[71]

Finally, with the transmission component of broadband classified under Title II, the FCC would have used 'forbearance' to select only the handful of provisions that make up the core of common carriage to apply to broadband. Title II includes 48 provisions that the Commission can choose among to apply to telecommunications services and the Third Way sought to forbear from all of these but six. The Third Way proposed applying three provisions relevant to universal service, privacy protection, and accessibility for people with disabilities— vital policy goals set out in the Commission's National Broadband Plan of 2010.[72] Three particular provisions, though, are the most relevant to net neutrality policy: Sections 201, 202, and 208 together consist of the nondiscrimination and interconnection requirements definitive of common carriage and the procedural means of enforcing those requirements.[73]

For as much as it tried to thread a very tight needle, Genachowski's Third Way plan was, I find, a surprisingly reasonable and substantive path forward to address the real issue of net neutrality policy: the classification of broadband transmission as telecommunications and its regulation as common carriage. As a plan for reclassification it did represent a missed opportunity for the FCC to go all the way and ensure openness at a built-in infrastructural level— with broadband under Title II, the FCC could choose to once again require open access for internet access providers, going back to the framework discussed in Chapters 2 and 3 that was so vital to innovation on the early internet and for other countries' superior broadband infrastructure. However, the Third Way would have forborne from requiring those unbundling

provisions of Title II.[74] As reclassification was back up for debate, open access was one of the biggest hopes for strong net neutrality advocates and one of the biggest fears for network operators. Some of the provisions that the Third Way proposed to forbear from requiring were logical. For instance, the provisions authorizing the FCC to directly regulate the rates which providers could charge are much more applicable to the Bell monopoly era and are a legitimate worry that might well scare off investment in broadband infrastructure due to the limited possible returns. Even though the broadband market is severely concentrated, the question of more interventionist regulation of internet access is simply a non-starter in the US until the deeper structural issues of control of communications network infrastructure can actually be dealt with— an admittedly radical, although likely beneficial, shift from private to public ownership that we will revisit in the Conclusion. The Third Way courted the impossible goal of pleasing everyone in the policy arena and came admirably close to an actually workable solution.

The Third Way was forwarded as a means to move forward on broadband policy, like the Open Internet rules themselves, but in the most "modest," "carefully balanced," and "least intrusive" way possible.[75] The Third Way— clear enough just from its title's iconic rhetoric for rejecting extremes on both sides and finding a reasonable middle ground— was steeped in an ideology of compromise as a panacea. Genachowski spent quite a bit of his time paying tribute to the wonders of communications technologies generally and broadband in particular, along with their importance for democracy, innovation, investment, inclusion, job creation, economic growth, education, and security (and, we can presume, Mom and apple pie, as well). In referring to what he assumed was a "broadly supported consensus" on a role of the FCC in broadband oversight— even going so far as to quote network operators' statements on the necessity of basic consumer and competitive protections— the Third Way plan asserted the need for "light touch"

but firmly established regulation.[76] In a feat of discursive acrobatics, jumping through two different hoops at the same time, Genachowski characterized his reclassification plan as "merely restor[ing] the longstanding deregulatory— as opposed to 'no-regulatory' or 'over-regulatory' compact."[77] For all the lengths to which Genachowski went to present reclassification as uncontroversial, network operators nonetheless took it as a declaration of war.

The response to the Third Way from network operators was swift, harsh, and largely detached from the facts of what was actually proposed. Mostly building on the characterization of common carriage as outdated and heavy-handed regulation mentioned above, arguments against the Third Way saw it as just the first step toward the FCC taking control over broadband in a regulatory regime akin to the Bell monopoly days, or perhaps even government censorship.[78] This response is, of course, nothing new from media corporations facing a new regulatory regime— the implication that federal regulation amounts to authoritarianism echoes, for instance, the broadcast industry decrying postwar media regulation as Communism. Verizon CEO Ivan Seidenberg commented, "We are very concerned that, in attempting to address legitimate issues about access to the Internet, the FCC has proposed basically an unimaginative and overbearing set of rules that essentially tries to retrofit a new industry into an old framework and expand their regulatory reach well beyond what is necessary."[79] NCTA president Kyle McSlarrow said, "It is a massive overreaction to suggest that we should impose decades-old regulatory regimes designed for the days of Ma Bell and a government-sanctioned monopoly on the Internet."[80] Republican FCC Commissioner Robert McDowell, a reliable voice for handing power over to corporate control in the name of principled libertarianism, said that reclassifying broadband would mean the US would be "losing the moral high ground" on the issue of internet freedom and giving comfort to the enemy when it comes to authoritarian governments censoring

the internet.[81]

To make these kinds of assertions was to misrepresent what the Third Way proposed in two particular ways. First, it relied on a slippery slope argument that willfully ignored forbearance as a regulatory tool: the Third Way explicitly proposed removing the vast majority of Title II's regulations to avoid exactly the concern from network operators that they would be subject to onerous monopoly-style regulation and further spelled out strong limitations on the Commission's ability to impose these requirements in some dystopian future FCC power grab.[82] Second, the notion that reclassification would lead to government regulation of speech online was downright silly. The Third Way's reclassification plan was first and foremost based on the separation of connectivity from content, for exactly the purpose of regulating the former to ensure the freedom of the latter. While Title II the Communications Act authorizes the FCC to intervene in the provision of network connectivity, nowhere does it allow for intervention into expression on those networks— indeed, Title II's requirements of openness in the flow of content would surely bolster the freedom of expression. Just as we saw in Chapter 3 around the Open Internet rulemaking generally, the reliable bogeyman of government regulation of internet content was unsurprisingly raised in response to the Third Way. However, without a doubt the whole point of reclassification of broadband would be to separate and keep open the conduit so that the content can remain untouched by censorial forces, public or private.[83]

Beyond bald-faced fear mongering, the primary argument against the Third Way was based on little other than the old canard that any and all regulation is a deterrent to investment and economic growth.[84] The idea that the mere mention of Title II would be enough to scare off growth in the broadband market was just a continuance of the neoliberal ideological misrepresentation of government intervention as poison to private enterprise. In fact,

infrastructure regulation typically serves to open up otherwise concentrated markets, increasing competition and therefore investment and growth (Benkler et al. 2010, Frischmann 2012). This was the case with internet infrastructure, which shows that the notion that investment would fall with common carriage regulation is simply inconsistent with history: the era when internet access providers were regulated under Title II saw massive investment, which began to slow in 2002 when these regulations were removed with the Title I broadband classification.[85] Further, while out of one side of their mouths telling policymakers of the sure disaster for investment that reclassification would bring, broadband providers explained the situation quite differently to investors themselves. Speaking at an investor conference, Time Warner Cable executive Landel Hobbs called the Third Way proposal "a light regulatory touch" that he acknowledged would not include rate regulation or any of the other provisions that network operators expressed such concern for to the FCC.[86] Actually, Hobbs put it quite directly: "[The Third Way proposal] would not crush investment in our sector. That's not at all what we believe. So, I want you to take away as, yes, we will continue to invest…"[87] This view was shared by independent investment analysts: a Merrill Lynch report dismissed "fear over the specter of regulation" and said "any Third Way regulation will have no impact on Cable growth."[88]

For their part, media reform advocates threw all their efforts behind the Third Way. Indeed, Genachowski's plan to reclassify under Title II and use forbearance to tailor appropriate regulation was actually quite similar to that for which Public Knowledge and Free Press had been calling.[89] As discussed in Chapter 4, the Save the Internet campaign spearheaded by Free Press took up the banner of reclassification and coordinated the submission of tens of thousands of citizen comments to the FCC proceeding that the Third Way initiated. In doing this, Free Press mostly recounted and explained the history behind the FCC's classification decisions that was

outlined in Chapter 3 to clarify the issue and its importance to net neutrality. As we have seen, this can be quite a challenging task for a battle playing out in technical terminology. As a post on the tech blog Ars Technica put it, "Debates about Title II of the Communications Act don't often make it into the op-ed pages of the *New York Times*. The fact that they did so in the past several days shows just how invested in arcane regulatory issues the public has become when it comes to the Internet."[90]

Lobbying by network operators turned the Third Way into a hot-button political issue inside the Beltway. The FCC had the ability to move forward on reclassification with a simple majority vote of commissioners, which Genachowski had with the support of the other Democratic Commissioners and net neutrality supporters, Copps and Clybourn. Although the FCC is an independent agency that does not need input from Congress or the White House to proceed, such pressure certainly has sway over how such decisions are made. The telecom industry's deeply entrenched influence on Capitol Hill meant that it was able to quickly whip up fervor to press the FCC: over a hundred lawmakers on both sides of the aisle signed letters strongly expressing concern over reclassification plans (although the figure was cited some places as over three hundred).[91] There were even rumors that the FCC received pressure from inside the White House to not go further on the Third Way, for fear of providing political ammunition for the libertarian Right in the run-up to the 2010 elections that saw the rise of the Tea Party.[92]

Having a reasonable discussion about the prospect of reclassification was in many ways foreclosed by the degree to which regulatory discourse is dominated by the telecom industry. The common sense of reclassification in the policy sphere was as a radical move— referred to in matter-of-fact fashion as "the nuclear option," the reader will recall. For instance, at a

congressional hearing, Genachowski was told by Republican Rep. Mike Johanns, "You've been handed your hat in your hand in the *Comcast* case... [and] you can't go to Title II, it'd be like remaking the world."[93] As we have seen, though, it was classifying broadband under Title I that was the actually radical move: Congress created Title II to apply to any network of two-way communication, which the internet most definitely is, but the FCC chose to go a new route based on manipulations of regulatory terminology and resulting in the mess surrounding the Open Internet rules. This was the main point hammered away at by net neutrality advocates: reclassification is, as Wu put it, simple "error correction."[94] Copps, always the most vocal defender of the public interest at the FCC, said, "I want to call telecommunications 'telecommunications' and go back to the openness that has characterized the Net since it was first invented in the laboratories of the Department of Defense. That's not extreme. That's not radical. That's called going back to basics. That's called consumer protection 101."[95]

The most effective response for network operators was simply to threaten to sue. Telecom companies, led by AT&T and Verizon, made clear their intentions to take the Third Way to court— throwing all the overwhelming legal firepower that they command at the FCC and tying up any attempt to reclassify broadband, and therefore any Open Internet rules along with it, in court for years.[96] As a particularly feverish press account put it, network operators would "almost certainly mount a vigorous legal challenge, leading to what could be an epic— and costly— court battle over who's the cyber-boss."[97] When network operators said that they believe the FCC does not have the evidence for its proposal to withstand judicial review and they made ominous references all the "legal uncertainty" sure to come while "courts sort through a new generation of mind glazing statutory characterization disputes," it was pretty clear that they intended to suffocate any reclassification proceeding in endless appeals and challenges.[98] That

threat of legal action proved enough to quickly scare the FCC away from reclassification.

After a few weeks of this political and legal pressure, Genachowski backed away from the Third Way. Word leaked that Genachowski was beginning to reconsider reclassification and soon it became clear that the FCC would maintain the classification of broadband as an information service.[99] No formal announcement on it ever occurred, but the Commission simply moved forward with the Open Internet proceeding and let the reclassification issue drop.[100] Some insiders doubted that Genachowski ever intended to actually take on reclassification and was merely using it as a bargaining chip in the closed-door negotiations discussed in Chapter 4.[101] Even so, I find it just as likely that he was incapable of standing firm on his position for long enough to get any movement from the network operators.

The sense in the policy sphere was that Genachowski cared first and foremost about getting some Open Internet rules on the books— being able to say that he delivered on his and President Obama's promise— not necessarily making sure they would actually work.[102] He was not interested in getting drug into a big ugly fight over it— in other words, what it would take to actually do it in a sustainable fashion. When it looked like going the Third Way would leave net neutrality policy tied up in court for years, Genachowski caved in to what the telecom industry wanted and negotiated his way to the weak Open Internet rules discussed in detail earlier in the chapter. This is a shame because the Third Way could have actually been an effective approach to the classification conundrum and could have led to strong net neutrality regulation— and is left now as a tremendously consequential missed opportunity. Despite the soundly constructed framework that the Third Way forwarded, Genachowski was unwilling to defend it in the face of the legal threats it would have likely been able to withstand. In choosing political expediency in backing away from reclassification, Genachowski avoided the immediate battle but prolonged

the war, ending up— after the *Verizon* case that struck down the Open Internet rules— with nothing to show for it anyway.

This left the FCC building the Open Internet Order on a legal foundation that it itself admitted was simply unable to support the rules. Schlick, the Commission's top lawyer, made clear in the Third Way legal analysis how relying on limited Title I authority is simply not a viable way of implementing net neutrality policy.[103] Citing Schlick's analysis, Genachowski referred to leaving the classification of broadband as it is as a "protracted, piecemeal approach to defending essential policy initiatives" with "a serious risk of failure in court."[104] As one vivid press analysis put it, "If that's indeed the FCC's plan, it's kinda laughable. It's like switching to a knife in a gun fight you're already losing."[105] As we will see in the Conclusion, when the Open Internet rules were taken to court by Verizon, the FCC did indeed fail in court, for exactly that reason.

There was not much left of the Open Internet rules that we have covered in this chapter following the *Verizon* case in January 2014. The heart of the Order— the no-blocking rule and the nondiscrimination rule— was thrown out in court, leaving only the transparency rule that we saw above is necessary but insufficient to net neutrality. The Order, as I argue, is nonetheless an important document in net neutrality discourse. It was the fruit of the policymaking process and discursive construction that we have followed in this dissertation thus far and it was also a regulatory force that worked to shape the structures of internet access not only for the short time that it was in effect but also through reverberations in FCC policy today. This is why it is imperative to understand the details of why and how the Open Internet Order fell short of net neutrality— 'net neutrality' policy without the net neutrality principles. We will see in the remainder of this dissertation, looking at the industrial arrangements and technical structures of

broadband networks, how this disarticulation of policy from principle played out in practice.

As significant as the FCC's action on Open Internet policy was, though, it was what the Commission did not do that is perhaps even more important. The Open Internet Order was a big step for net neutrality policy and discourse, but I assert it has proven more consequential for what it was not: meaningful protection for net neutrality through common carriage regulation. Indeed, because these rules were implemented without accompanying reclassification of broadband as a telecommunications service— as the failed Third Way proposal would have done— the strengths and weaknesses of the Open Internet rules themselves did not really matter. Any rules passed by the FCC would not be net neutrality if they do not work within the regulatory tradition of common carriage out of which net neutrality came. Further, the contradiction of accompanying the Open Internet Order with inaction on a reclassified framework upon which it could stand doomed (at least the core) of the rules to failure in court. Regardless, though, the internet after the Open Internet Order— after its enactment and subsequently after its very existence— began to take a decidedly non-neutral shape. This is what we will look at in the next chapter.

Notes

[1] Lasar, Matthew. "Net Neutrality Rules: Coming December 21." *Ars Technica*. 1 Dec. 2010. Web. 10 July 2014. http://arstechnica.com/tech-policy/2010/12/will-we-have-net-neutrality-rules-by-christmas/; Eggerton, John. "Genachowski: Dec. 21 Net Neutrality Vote "Essential""*Broadcasting & Cable*. 14 Dec. 2010. Web. 10 July 2014. http://www.broadcastingcable.com/news/washington/genachowski-dec-21-net-neutrality-vote-essential/58285?rssid=20065.

[2] Jerome, Sara. "Genachowski Might Need to Win Title II Proponent Copps to Pass Net-neutrality Rules." *TheHill*. 23 Nov. 2010. Web. 10 July 2014. http://thehill.com/policy/technology/130477-genachowski-may-need-to-win-title-ii-proponent-copps-to-pass-net-neutrality-rules.

[3] See attached statements to the FCC Open Internet Order, GN Docket No. 09-191, https://apps.fcc.gov/edocs_public/attachmatch/FCC-10-201A1.pdf. McDowell. "Dissenting Statement," In the Matter of Preserving the Open Internet, FCC, GN Docket No. 09-191: 145-172; Baker. "Dissenting Statement," In the Matter of Preserving the Open Internet, FCC, GN Docket No. 09-191: 180-194; Copps. "Concurring Statement,"

In the Matter of Preserving the Open Internet, FCC, GN Docket No. 09-191: 140-144; Clybourn, "Approving in Part, Concurring in Part, Statement," In the Matter of Preserving the Open Internet, FCC, GN Docket No. 09-191: 178-179.

[4] Order, In the Matter of Preserving the Open Internet ("Open Internet Order"), 25 FCC Rcd. 17905 (2010), https://apps.fcc.gov/edocs_public/attachmatch/FCC-10-201A1.pdf: 17937.

[5] Ibid.: 17938.

[6] Ibid.: 17938-17939.

[7] Ibid.: 17939.

[8] The FCC's own analysis even shows this. See: *Broadband Decisions: What Drives Consumers to Switch—Or Stick With—Their Broadband Internet Provider*, FCC, Working Paper, Dec. 2010, http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-303264A1.pdf.

[9] FCC Internet Policy Statement of 2005, https://apps.fcc.gov/edocs_public/attachmatch/FCC-05-151A1.pdf.

[10] Open Internet Order: 17942.

[11] Ibid.: 17942.

[12] Ibid.: 17943.

[13] Ibid.: 17943.

[14] Ibid.: 17964.

[15] Ibid.: 17963.

[16] Khristyn Brimmeier, "Music, Film, TV, and Broadband Collaborate to Curb Online Content Theft," Center for Copyright Information, Recording Industry of America Association, 7 July 2011, http://www.riaa.com/newsitem.php?content_selector=newsandviews&news_month_filter=7&news_year_filter=2011&id=2DDC3887-A4D5-8D41-649D-6E4F7C5225A5.

[17] Open Internet Order: 17944.

[18] Ibid.: 17944-17946.

[19] Ibid.

[20] Ibid.: 17944.

[21] Ibid.: 17944-17946.

[22] Ibid.: 17987-17991.

[23] Ibid.: 17991.

[24] Ibid.: 17952.

[25] Ibid.: 17908.

[26] Ibid.: 17952.

[27] *Comcast v. FCC*, https://apps.fcc.gov/edocs_public/attachmatch/DOC-297356A1.pdf.

[28] Comcast Order, https://apps.fcc.gov/edocs_public/attachmatch/FCC-08-183A1.pdf: 29.

[29] Anonymous media reform advocacy group strategist, Personal interview with author, 21 February 2014.

[30] Open Internet Order: 17957-17958.

[31] Ibid.: 17958.

[32] Ibid.: 17959.

[33] Ibid.

[34] Ibid.

[35] Ibid.

[36] McGann, Laura. "Mark Fiore Can Win a Pulitzer Prize, but He Can't Get His iPhone Cartoon App past Apple's Satire Police." *Nieman Journalism Lab*. Harvard University, 15 Apr. 2010. Web. 10 July 2014. http://www.niemanlab.org/2010/04/mark-fiore-can-win-a-pulitzer-prize-but-he-cant-get-his-iphone-cartoon-app-past-apples-satire-police/; Darlrymple, Jim. "Apple Rejects IPhone App over Access to Kama Sutra."*CNET*. 22 May 2009. Web. 10 July 2014. http://www.cnet.com/news/apple-rejects-iphone-app-over-access-to-kama-sutra/; Chittum, Ryan. "Apple's Speech Policies Should Still Worry the Press."*Columbia Journalism Review*. 20 Apr. 2010. Web. 10 July 2014. http://www.cjr.org/the_audit/apples_speech_policies_should.php; Wingfield, Nick. "Apple Rejects App Tracking Drone Strikes." *Bits*. The New York Times, 30 Aug. 2012. Web. 10 July 2014. http://bits.blogs.nytimes.com/2012/08/30/apple-rejects-app-tracking-drone-strikes/; Singel. "Developer: Apple Denied Health Care App for Political Reasons." *Wired*. 28 Sept. 2009. Web. 10 July 2014. http://www.wired.com/2009/09/apple-denied-health-care-app-for-political-reasons-developer-says/.

[37] Singel. "Google Voice App Rejection: AT&T Blames, Apple Denies, Google Hides | Business | WIRED." *Wired*. 21 Aug. 2009. Web. 10 July 2014. http://www.wired.com/2009/08/apple-att-and-google-respond-to-feds-on-google-voice-rejection/.

[38] Open Internet Order: 17957.

[39] Ibid.

[40] Ibid.: 17907-17911.

[41] Ibid.: 17958.

[42] Fitchard. "Is the Spectrum Crisis a Myth?" http://gigaom.com/2012/01/30/is-the-spectrum-crisis-a-myth/; Bode. "FCC Insider: Spectrum Crisis 'Manufactured'" Blog post. *DSLReports*. 1 Feb. 2011. Web. 10 July 2014. http://www.dslreports.com/shownews/112526.

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[44] Bode, Karl. "Verizon: Trust Us, We're Not Hoarding Spectrum." Blog post. *DSLReports*. 18 Apr. 2013. Web. 10 July 2014. http://www.dslreports.com/shownews/123929.

[45] Brodkin, Jon. "FCC to Verizon: What's Wrong with That Spectrum You Never Built Out?" *Ars Technica*. 16 May 2012. Web. 10 July 2014. http://arstechnica.com/tech-policy/2012/05/fcc-to-verizon-whats-wrong-with-that-spectrum-you-never-built-out/.

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[47] Moving Forward: Driving Investment and Innovation While Protecting Consumers, Report, FCC, 15 January 2009, http://transition.fcc.gov/fcc-moving-forward-report.pdf: 24.

[48] Gardner, Bryan. "In Spectrum Auction, Winners Are AT&T, Verizon and Openness." *Wired*. 20 Mar. 2008. Web. 10 July 2014. http://www.wired.com/2008/03/fcc-releases-70/.

[49] Open Internet Order: 17958.

[50] Ibid.: 17962.

[51] Ibid.: 17962.

[52] Ibid.

[53] Ibid.

[54] Ibid.: 17907.

[55] "Reply Comments of Public Knowledge," In the Matter of Preserving the Open Internet, FCC, GN Docket 09-191, 26 April 2010, http://www.publicknowledge.org/files/docs/PK_NN_Reply_Comments_4-26-10_FINAL.pdf.

[56] Ibid.

[57] Ibid.

[58] Ibid.

[59] Another future path opened up by moving broadband under a Title II framework is bringing back open access requirements on internet access infrastructure, requiring network operators to sell wholesale access to their networks to competing independent ISPs. This is discussed further in the Conclusion.

[60] Singel, Ryan. "FCC Prepares to Re-Regulate Broadband Providers." *Wired*. 03 May 0010. Web. 10 July 2014. http://www.wired.com/2010/05/fcc-reclassify-broadband/.

[61] "Letter from Broadband Industry to Chairman Julius Genachowski," In the Matter of Preserving the Open Internet, FCC, GN Docket No. 09-191, 22 February 2010, http://apps.fcc.gov/ecfs/document/view;jsessionid=0Sz7RknD17vl3p8WhFmTF3nbhwnfLCrFy3gQy5cMV2D1G17fh1RX!-1694890999!-477673473?id=7020544679.

[62] Ibid.: 5.

[63] Ibid.

[64] Ibid.: 6.

[65] "Reply Comments of Public Knowledge."

[66] Genachowski, Julius, "The Third Way: A Narrowly Tailored Broadband Framework," FCC, 6 May 2010, http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-297944A1.pdf; Schlick, Austin, "A Third-Way Legal Framework for Addressing the *Comcast* Dilemma," 6 May 2010, http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-297945A1.pdf.

[67] Schlick, "Third-Way Legal Framework:" 2.

[68] Genachowski, "The Third Way:" 1.

[69] As Schlick put it: "The *Brand X* case put six Justices on record as saying that classification of cable modem service is a call for the FCC to make and that 'the Commission is free within the limits of reasoned interpretation to change course if it adequately justifies the change;' one of the six 'just barely' accepted the FCC's information service approach; and the three remaining Justices expressed the view that the agency must classify a separable telecommunications service within cable modem offerings. As many as all nine Justices, it seems, might have upheld a Commission decision along the lines Justice Scalia suggested." Schlick, "Third-Way Legal Framework:" 7.

[70] See Scalia's *Brand X* dissent quoted above.

[71] To do this, the FCC would have to undergo a functional analysis to find the proper line to draw between telecommunications and information within broadband service. This line was drawn before in the dialup era and I assert that it would have sufficient evidence to support drawing it again, especially given that the information service portions of broadband that were previous found "inextricably linked" to the telecommunications portions are actually properly understood as occurring within a telecommunications service anyway. For instance, the IP address conversion and assignment, DNS resolution, network security, caching, monitoring, capacity engineering and management all involve some information processing, but are ultimately done in the service of delivering data from point A to point B in the network and, therefore, are properly defined as part of the transmission component of internet access service. This is more fully discussed in Chapter 3.

[72] Schlick, "Third-Way Legal Framework:" 4-5.

[73] Sections 201, 202, and 208 together forbid unreasonable denials of service and other unjust or unreasonable practices. Section 201 establishes just and reasonable charges and services (including interconnection with other common carriers), Section 202 prohibits unjust or unreasonable discrimination, as well as undue or unreasonable preference or advantage, and Section 208 covers complaints to the Commission and grounds for investigations. 47 USC 201-202, 208.

[74] Schlick, "Third-Way Legal Framework:" 7-8.

[75] Genachowski, "Third Way:" 1-2, 6.

[76] Ibid.: 8.

[77] Ibid.: 5

[78] Lasar. "Dark Words Fly as FCC Launches New Net Neutrality Probe." *Ars Technica*. 17 June 2010. Web. 10 July 2014. http://arstechnica.com/tech-policy/2010/06/dark-words-fly-as-fcc-launches-new-net-neutrality-probe/.

[79] Kang. "Verizon CEO Seidenberg: Open to Some Compromises, Not Greater FCC Authority over Broadband." *Post Tech*. *The Washington Post*, 22 June 2010. Web. 10 July 2014. http://voices.washingtonpost.com/posttech/2010/06/verizon_ceo_seidenberg_open_to.html.

[80] Lazarus, David. "FCC Needs to Protect Net Use." Editorial. *The Los Angeles Times*. 27 Apr. 2010. Web. 10 July 2014. http://articles.latimes.com/2010/apr/27/business/la-fi-lazarus27-20100427.

[81] Lasar, "Dark Words Fly…" http://arstechnica.com/tech-policy/2010/06/dark-words-fly-as-fcc-launches-new-net-neutrality-probe/.

[82] Schlick, "Third-Way Legal Framework:" 7-8.

[83] We can set aside for now the arguable necessity for openness and nondiscrimination regulation for online content platforms that are in analogous gatekeeper roles as internet access providers. For instance, Vaidhyanathan, Gillespie, Sandvig, and others have made convincing arguments that online content providers like Google, Facebook, and YouTube should be subject to regulation of some sort to ensure more transparency and openness.

[84] Lasar. "Few Neutrals in Debate over "Third Way" Net Neutrality Plan." *Ars Technica*. 19 July 2010. Web. 10 July 2014. http://arstechnica.com/tech-policy/2010/07/few-neutrals-in-debate-over-third-way-net-neutrality-plan/.

[85] Capital investment as percentage of revenues, compiled from company annual reports from 1994-2009, shows this trend. See investigation: Sridhar, Aparna. The Truth About the Third Way: Separating Fact from Fiction in the FCC Reclassification Debate. Report. Free Press. http://www.freepress.net/sites/default/files/fp-legacy/The_Truth_About_the_Third_Way.pdf: 10-12.

[86] JP Morgan Global Technology, Media and Telecom Conference: Time Warner Cable. Management Discussion (May 19, 2010).

[87] Ibid.

[88] Jessica Reif Cohen, "FCC Decision Centered on Net Neutrality; Not Overreaching," Bank of America Merrill Lynch Research (May 6, 2010).

[89] They wanted open access unbundling, too, but the basic plan is the same.

[90] Anderson, Nate. "Making ISPs Common Carriers: Just a Simple "Error Correction"" *Ars Technica*. 19 Apr. 2010. Web. 10 July 2014. http://arstechnica.com/tech-policy/2010/04/making-isps-common-carriers-just-a-simple-error-correction/.

[91] Letters to Chairman Genachowski, House of Representatives (http://netcompetition.org/House_Democrat_Letter.pdf), United States Senate (http://netcompetition.org/Senate_Republican_Letter.pdf), 24 May 2010. Letter to Chaiman Genachowki, Committee on Energy and Commerce, House of Representatives, 10 November 2010 (https://www.publicknowledge.org/files/Republican%20Members%20of%20EC%20to%20Chairman%20Genachowski-%20FCC.pdf).

[92] Hart, Kim, and Jennifer Martinez. "What's next for Net Neutrality Debate?"*POLITICO*. 14 Oct. 2010. Web. 10 July 2014. http://www.politico.com/news/stories/1010/43548.html.

[93] Anderson, "Making ISPs Common Carriers…" http://arstechnica.com/tech-policy/2010/04/making-isps-common-carriers-just-a-simple-error-correction/.

[94] Wu, Tim. "Why Net Neutrality Isn't Dead." *Slate*. 13 Apr. 2010. Web. 10 July 2014. http://www.slate.com/articles/news_and_politics/jurisprudence/2010/04/is_net_neutrality_dead.single.html. See also: Turner, S. Derek. Testimony Regarding the National Broadband Plan: Deploying Quality Broadband Services To The Last Mile. Before the United States House of Representatives, Committee on Energy and Commerce, Subcommittee on Communications, Technology and the Internet. Free Press. 21 April 2010. http://www.savetheinternet.com/sites/default/files/fp-legacy/Turner_April_21_2010_NBP_House_Testimony.pdf.

[95] "FCC Commissioner Michael Copps on Net Neutrality and Media Consolidation." *Bill Moyers Journal*. PBS. 23 Apr. 2010. Web. 10 July 2014. http://www.pbs.org/moyers/journal/04232010/transcript2.html. Transcript.

[96] Anderson. "ISPs Sound Ready to Sue over FCC's "third Way"" *Ars Technica*. 7 May 2010. Web. 10 July 2014. http://arstechnica.com/tech-policy/2010/05/isps-sound-ready-to-sue-over-fccs-third-way/.

[97] Lazarus, "FCC Needs to Protect Net Use," http://articles.latimes.com/2010/apr/27/business/la-fi-lazarus27-20100427.

[98] Ibid.

[99] Kang. "FCC Chair Prefers to Keep Framework for Broadband Unchanged: Sources." Post Tech. *The Washington Post*, 2 May 2010. Web. 10 July 2014. http://voices.washingtonpost.com/posttech/2010/05/fcc_chair_prefers_to_keep_broa.html.

[100] Jerome, Sara. "FCC Poised to Approve Net-neutrality Rules on Tuesday, but Title II Still Looms." *TheHill*. 21 Dec. 2010. Web. 10 July 2014. http://thehill.com/policy/technology/134593-overnight-tech-fcc-poised-to-approve-net-neutrality-rules-on-tuesday-but-title-ii-still-looms.

[101] Anonymous media reform advocacy group strategist, Personal interview with author, 21 February 2014.

[102] Ibid.

[103] Schlick, "Third-Way Legal Framework."

[104] Genachowski, "Third Way:" 4.

[105] Scola, Nancy. "What the FCC Is Giving Up." *The American Prospect*. 3 May 2010. Web. 10 July 2014. http://prospect.org/article/what-fcc-giving.

Chapter 6

Net Neutrality After the Open Internet Order

Net neutrality is ultimately important because it is an emergent media keyword in communications policy that will shape the future of internet infrastructure and what can be done with it by industry and users. How the discourse surrounding it is defined in the media policy sphere has already brought with it great consequences for the shape of the internet and what users can do with it. The internet is a global network interconnecting all kinds of content, applications, services, and devices, but the openness of the internet ultimately depends on the openness of the particular networks that provide access to it. From an internet user's perspective, no matter how universal the protocols, decentralized the nodes, or end-to-end the architecture, if the owner of the last mile connection does not provide access to whatever information the user wants and does not carry her messages through to the other side without interference, the structure of the internet is troublingly restrictive. Regulating broadband the way the FCC did in the Open Internet Order was very significant, then, because it left these internet access networks unprotected by the openness guarantees of common carriage and strayed too far from the principles of net neutrality.

This chapter discusses the aftermath of the Open Internet rules. Taking a critical approach to media industries studies and infrastructure studies, drawing on trade press reports, technical literature, and corporate documents, the analysis in this chapter focuses on two particular contexts in which a pending post-net-neutrality world began to take shape after the Open Internet Order, each developed in its own section. The first context is that of internet infrastructure,

where the material existence of the network itself is being remade in an environment without effective protection for net neutrality. This is investigated in a case study of Comcast's Xfinity IPTV service and what it represents in the splintering of multiple 'internets:' in Comcast's preferential treatment of its own Xfinity service, such as not counting Xfinity Xbox app traffic against users' data caps and prioritizing its traffic, we can see not only a way of building discrimination into internet infrastructure itself, but also an underlying logic of constructing private networks distinct from "the public internet" and any of its expectations or protections for fair and equitable structures. The second context is the telecommunications industry where, in the wake of ineffective (and then nonexistent) net neutrality protections, broadband providers began by 2013 to unveil business models that count on and profit from traffic discrimination. This is examined through a case study of AT&T's mobile broadband service and the selective enforcement of its data caps: the Sponsored Data plan where mobile application providers pay AT&T for their traffic to not count against users' monthly data usage totals is a clear example of problematic 'pay-for-play' arrangements, where the broadband bottleneck becomes a site of toll-collecting to reach users and broadband providers take up the role of gatekeeper of online circulation. Overall, this chapter shows how the prevailing legal, industrial, and technical understanding of the internet began to shift after the Open Internet Order, by which the participatory possibilities of unconstrained circulation and dialogical communications gave way to a logic of network discrimination and separate and unequal service.

My analysis draws from other scholars' work on the shifting economics and technical workings of internet infrastructure, but I approach the situation from a different perspective. Background understanding based in legal, economic, and technical knowledge of telecommunications industries and technologies— perhaps most usefully forwarded by Weiser,

with Jonathan Nuechterlein (2013)— is vital to my understanding of the issues discussed in this chapter and throughout this dissertation. However, a critical analysis of the social and cultural implications of industrial arrangements and technical infrastructures based on differential treatment of network traffic have not been addressed in literature tending to leave aside the deeper power relations.

In particular, existing scholarship has not gone far enough to consider issues such as data caps, sponsored data, and specialized services as structural affordances for the emergence of an internet controlled from the top down. The move towards greater differential treatment of broadband network traffic has been a major subject of research in computer science and network engineering (e.g., Andrews, Bruns, and Lee 2014; Trossen and Biczók 2010), but these fields are concerned primarily with the design and development of such techniques of discrimination and not the critical evaluation of their advisability. The rise of data caps and related transitions toward user-restrictive business models in the broadband market has been taken up almost exclusively within legal scholarship from its typically econometric assessment of industrial practices and the limited critical value of "consumer welfare" approaches (Dai and Jordan 2013; Lyons 2013; Minne 2012). Most of the in-depth treatment of specialized services that has happened has occurred primarily within the policy sphere and has come with the instrumental constraints we have discussed on the sort of analysis that can occur there.[1] Further, none of this work has put as forcefully as I feel is necessary that the shifting dynamics of telecommunications industries and infrastructures have entered another phase of transition in the period following the implementation of the Open Internet regulations in 2011— one, I argue, that is a stretch to call 'open.' Exceptions to this, however, include a small set of more political-economic-minded research, led by Crawford within legal scholarship and Holt within media studies.

Crawford's *Captive Audience* (2013) is an important work encapsulating the dynamics of the telecom industry, lauded for its trenchant critique of concentrated power over broadband networks, but her earlier work on the law, economics, technologies, and politics of broadband (2007, 2009, 2010) I find actually more incisive. Even with her political economic bent and crucial role in forwarding a vision of net neutrality as an issue of democratic communications, Crawford's work can nonetheless tend toward the reductive 'consumer welfare' orientation of much legal scholarship based in neoclassical economics— lacking a critical politics that I am mindful to augment her work with as I build on it here.

Holt's recent work traces lines of broadband industries, infrastructure, and policy from within media studies (2012, 2014), similar to this dissertation. Indeed, Holt usefully addresses issues discussed in this chapter, such as managed services and data caps, as matters of what she calls "cloud policy" (2014). However, my contributions differ in a number of ways. To begin with, I object to her characterization of these issues as "cloud policy," a phrase that in use obscures more than it reveals about internet infrastructures (as discussed in the Introduction). This is one example of how my approach is more sensitive to the particularities of discourse and infrastructure than Holt's: leaning on "the cloud" as a keyword only perpetuates a 'black box' (or, perhaps in this case, a fluffy white box) vision of the involved technologies. Further, Holt's perspective from a media industries studies approach is primarily concerned with net neutrality's implications for content providers in their distribution strategies to users, while mine is more directly focused on the impact for those users themselves. For instance, Holt is too willing to align the interests of content providers with those of users (2014), which, as we have seen above, is a problematic assumption to make even if there are temporary overlaps.

My analysis in this chapter is also in a certain way a response to research within media

studies regarding the digital distribution of media content and user participation in the circulation of online culture. The growing body of work on digital distribution (e.g., Perren 2013; Holt and Sanson 2014) has come largely from the same media industries studies approach that Holt has forwarded, with Alisa Perren (2011), which, as mentioned above, leaves room for work that goes beyond the industrial logics laid out there and more into their consequences, as this dissertation does. Meanwhile, recent work in media and cultural studies has fruitfully focused on user participation in cultural circulation online (e.g., Christian, Forthcoming; Baym 2011; Burgess and Green 2009), led most prominently by Jenkins extending his theories of "participatory culture" developed in *Convergence Culture* (2006) to *Spreadable Media* (et al. 2013). I find great value in this work and I fully support the project of championing grassroots media creativity and circulation, as Jenkins and others coming from such a perspective do. For instance, the work of Aymar Jean Christian demonstrates the very real possibilities being opened up through online media for more self-representation and greater circulation for independent video makers— especially for women, people of color, and others from historically marginalized communities (Forthcoming). Notably, though, Christian foregrounds how these possibilities exist within a larger frame of concentrated ownership structures and fragmented technological infrastructures that they must overcome (2012). This is unfortunately an exception within this literature, as much of it remains open to the familiar political economic critique that a 'celebratory' approach over-emphasizes user agency with too little consideration of the larger structures within which it operates.

While I find Jenkins' theories of "participatory culture," and the cases it is based on, very important positive visions of what advocates of more democratic communications are fighting for, I assert that the critical value of such an approach is much higher when it is augmented with

analysis of the industrial, regulatory, and technological structures that afford or delimit these participatory possibilities— a gap in this literature which this dissertation fills. In this chapter, I build on Jenkins' understandings of the distinctions between *distribution* and *circulation* (et al. 2013): these notions bring into view the ways that media industries encourage participation, but on their terms, stopping short of truly open circulation as they seek ways to profit from active participation and channel it toward more controlled interactivity and consumptive behavior. Rather than recognizing the ways that the debate over net neutrality is a consequential battle between these two dynamics of distribution or circulation— indeed, I argue that net neutrality is the fundamental structural condition that enables meaningful user participation online— Jenkins seems to take for granted that the internet is ushering in a shift from the control of the former to the freedom of the latter. While he admits that ownership structures are crucial conditions shaping participation in media, Jenkins asserts that online participatory culture has risen up in the face of corporate concentration because the internet has brought with it differences in control: if the logic of broadcasting is centralized control over content and the logic of telecommunications is decentralized control over carriage, then in Jenkins' mind, as the latter has become dominant it has brought with it diminished "editorial oversight" over networked content (et al. 2013: 162). However, as should be evident through the course of this dissertation, network operators are shifting the model of internet access from telecommunications to broadcasting, by successfully redefining broadband in communications policy as an "information service," and, as we will see in the Conclusion, are pushing to take more control of network content through the "editorial oversight" that comes with such policy. Indeed, the telecommunications industry's entire strategy since the broadband era began has been to use media regulation to aid a shift from circulation to distribution online. This makes Jenkins' projection that media accessed through

internet infrastructures will necessarily be more open and characterized more by circulation than distribution a glaringly problematic assumption. In fact, for an entire book about media circulation on the internet, with a focus on the cultures and communications of everyday users, *Spreadable Media* (2013) has only a single passing mention of net neutrality, even though it is exactly the infrastructural condition which enabled such participation in the first place and is in the midst of a pivotal battle that could unravel the positive progress the book chronicles.[2] I seek to remedy this engagement between visions of online participation with the larger political economic structures and technological infrastructures that shape it by laying out in this chapter some of the ways in which weak net neutrality protections threaten to undermine the participatory possibilities of online culture. Before getting to shifting business models, we will look at changes within internet infrastructures themselves.

Shaping the technology: Specialized services infrastructure

Cable broadband networks grew up in an environment unprotected by the openness guarantees of common carriage regulations and developed with a set of structural limitations on user-led circulation of content and communications. This dynamic was exacerbated by the FCC's weakness on the net neutrality issue, including the Open Internet Order of 2010, as broadband providers such as Comcast have worked toward next-generation networks separate from what users take for granted as the internet in the wake of the rules.

This section will explore some of the ways in which internet infrastructure itself has been reshaped in the aftermath of the FCC's net neutrality policies from 2005 to 2013. It will first discuss three structural conditions of cable broadband networks that came about through the reception of FCC broadband policy (or the lack thereof). It will then focus on a case study of

Comcast's Xfinity as a 'specialized service' and what the broadband behemoth's operation of this IPTV service demonstrates about the network infrastructure of a pending post-net-neutrality world. Comcast's preferential treatment of its own Xfinity service represents a salient example of discrimination that was allowed under the Open Internet rules, but what it reveals about the structural inequalities of next-generation network infrastructure is perhaps even more troubling.

There is only one wire coming into the typical US home that is capable of providing truly viable high-speed internet access: cable. The only other line coming into most homes that is used to provide broadband access is DSL, which relies on phone companies' outdated copper wire and is more difficult to upgrade. Cable networks employ more fiber in their infrastructure and have moved to DOCSIS 3.0 updates, making DSL service unable to compete with their speed and bandwidth. Indeed, DSL providers essentially waved the white flag at cable providers by 2011: AT&T stopped upgrading its DSL networks altogether and Verizon made a deal with a consortium of cable operators to bundle its mobile services with their cable broadband services (Crawford 2013). Further, even with the growth of 4G cellular data networks, mobile broadband service is still very limited in capacity and is typically supplementary to wired access for most users. Only the fiber-to-the-home networks that are very rare as of this writing are able to provide superior service.[3] The 'natural monopoly' economics of the 'last mile' networks that connect homes to the internet are usually compounded by the regulatory creation of an actual monopoly: local authorities often allow only a single cable company to build a network in their area and, because they are not defined as "telecommunications services" with open access requirements to share their lines with other ISPs, the owner of that network becomes the sole provider of cable broadband access in that area. This has created not only local monopolies, but a drastically concentrated market for internet access services nationwide, as well. Without open

access to network infrastructures, independent ISPs were unable to compete with network operators: without a regulated separation between "telecommunications" and "information," cable companies vertically integrated the two services as broadband and essentially eliminated the market for non-facilities-based ISPs. The result is a concentrated market for broadband services in the US, largely dominated by cable operators, with little regulation or competition to check the power inherent in control over the bottleneck of internet access. The exclusive operation of that line to and from the internet put in place by regulation makes cable operators gatekeepers, structurally positioned to control what users can and cannot do on the internet.

The second structural restriction resulting from the terms of broadband regulation is locking into internet access networks the consumption-based affordances of cable networks. The FCC's classification of internet access enabled cable broadband to take a dominant position and by helping cable operators take over the internet access market, such regulation has baked into the common internet access network many patterns of use that are more consistent with the habits of television audiences than the participatory practices of internet users. This comes with the architecture of cable networks that were built to replicate broadcasting logics: cable networks were developed and optimized for the one-way delivery of video programming from providers to consumers, not open two-way communication between end-users.[4] Cable broadband networks are built to be 'asymmetrical,' meaning that they have greater capacity for downloads than for uploads. This emphasis on 'downstream' traffic has built into the network infrastructure the identity of internet users as first and foremost consumers and not producers— an assumption based on the precedent of internet usage patterns of the dialup era (before the widespread creation and circulation of internet content by everyday users), not to mention the cable industry's preference for the one-to-many model of television distribution based in broadcasting

logics.

The physical layout of cable infrastructures affords further restraints on internet users. Cable networks are 'contentious' in the sense that their capacity is shared among local loops— a user essentially competes with her neighbor for bandwidth. This material constraint opened the door for further limitations by cable operators: rather than expand network capacity to address the issue, cable companies such as Comcast and Time Warner have used the situation as justification to impose data caps on users, despite the fact that usage during peak times, rather than total monthly usage, is the problem (see Crawford 2013: 170-187). Undoubtedly, broadband connections have enabled users greater opportunities for both accessing content and participating in its creation and circulation, from user-generated content platforms and peer-to-peer filesharing to massively multiplayer online gaming and video-chatting services. However, the structural affordances of asymmetric, contentious, data-capped broadband networks encourage users to be primarily consumers by circumscribing online participation (Crawford 2009).[5]

The third structural restriction enabled by the terms of broadband regulation is the increasingly closed shape of the internet as managed by broadband operators. With the removal of common carriage regulations accompanying broadband's classification as an "information service," network operators were able to pursue the technical means to further leverage their gatekeeper position and downstream-optimized affordances into even greater control over internet use. With this door open to greater prioritizing, throttling, and blocking on internet infrastructure, the networking equipment industry developed 'network management' technologies such as deep packet inspection, traffic shaping, and content filtering that were enthusiastically embraced by broadband providers (van Schewick 2010). With a lack of strong net neutrality protections that will remain in place to prevent interference into users' online

activities, broadband providers had little incentive to innovate in any ways other than those that further consolidate their control (Bar 2000; Cooper 2000). Indeed, the next-generation networks that broadband providers are now rapidly developing are mostly devoted to 'specialized services' like IPTV that are closed off to exclusively affiliated content (Crawford 2013).

This suggests not only a further reshaping of the internet in the image of cable television, but also represents a splintered future of separate but unequal 'internets.' As network operators follow profit motives to deploy tightly controlled 'private internets' at the expense of existing broadband networks, the open "public internet" could easily wither away from lack of infrastructure investment. This could be the beginning stage of a fundamental alteration of the open architecture of the internet. It is ultimately about restricting the unruly circulation of user communication and content through a more top-down model of distribution for commercial media industries to distribute their content and users to consume it— reshaping the internet from an open public resource toward a closed commercial content delivery system.

The leading example of this dynamic comes from Comcast and the way it has developed and managed its broadband infrastructure— especially in regard to its Xfinity IPTV service. Comcast customers who subscribe to both its broadband internet and cable television offerings are given access to its Xfinity online video service over their internet connection. As a vertically integrated conglomerate that owns both the content and the pipeline used to deliver that content (Comcast is the nation's largest internet access provider and the owner of NBC-Universal's large stable of film and television programming), Comcast has strong incentives to favor its own content over others it carries and, in two particular ways, it does just that.

First, if Comcast broadband and television subscribers are also members of Microsoft's Xbox Live, they are able to watch Xfinity through their Xbox 360 and it does not count toward

their total data usage for the month.[6] Through the use of a data cap exemption scheme, similar to that of AT&T explored in more detail below, Comcast gives unfair preferential treatment to its own online video service, at the expense of competitors. More attention began to be paid to this matter in 2012 when Netflix CEO Reed Hastings called out Comcast for not "following network neutrality principles."[7] Writing in a Facebook status update, Hastings mused:

> I spent the weekend enjoying four good internet video apps on my Xbox: Netflix, HBO GO, Xfinity, and Hulu. When I watch video on my Xbox from three of these four apps, it counts against my Comcast internet cap. When I watch through Comcast's Xfininty app, however, it does not count against my Comcast internet cap. For example, if I watch last night's SNL episode on my Xbox through the Hulu app, it eats up about a gigabyte of my cap, but if I watch that same episode through the Xfinity Xbox app, it doesn't use up my cap at all. The same device, the same IP address, the same wifi, the same internet connection, but totally different cap treatment. In what way is this neutral?[8]

This was certainly a violation of net neutrality principles and such preferential treatment for Comcast's own services over others is a textbook case of anticompetitive business practices— as the one company that happens to owns a high-speed connection into that user's house, Comcast has been leveraging its monopoly in the broadband market into an unfair advantage in the adjacent online video market. Indeed, it veered so far into antitrust enforcement territory that it has actually caught the eye of federal regulators who tend to look the other way from abuses of monopoly power: the US Justice Department has opened an investigation into data cap exemptions and similarly anticompetitive practices by the cartel of cable companies that includes Comcast and Time Warner against online video services like Netflix and Hulu, although the agency has yet to take any enforcement action as of this writing.[9]

Although we will discuss data cap exemptions in more detail below in the case of AT&T's Sponsored Data plan, it is worth briefly mentioning here the ways that such schemes are used by companies like Comcast to protect their legacy business model. Cable companies like Comcast

fear the growing numbers of 'cord cutters' who cancel their traditional cable subscriptions and watch all of their TV content on the internet (Vanderhoef and Sanson 2014). They further realize that operating their broadband networks on an open basis only helps facilitate growing competition from online video services like Netflix that undermine their core business.[10] Comcast, then, has incentives to discourage users from ditching cable television and it is acting on those, especially in its discriminatory use of data caps. Films and TV programs eat up a great deal of data, making them especially vulnerable to data caps. Comcast has been targeting cord cutters by using data cap overages to make up for lost cable subscription revenues and seeking to avoid losing television subscribers in the first place by making it more expensive and difficult to substitute cable TV for online video.

Additionally, there is evidence that suggests that Comcast prioritizes traffic to the Xfinity Xbox app over the rest of the data flowing on its network. While the details of Comcast's network management practices are left opaque and there are conflicting accounts of the technical infrastructure in question, it appears that Comcast has been speeding up its Xfinity traffic through a 'fast lane' on its broadband network to the Xbox.[11] This goes even beyond competition concerns, as such discrimination has serious concrete impact on the flow of all other traffic on the network: bandwidth capacity is a zero sum game, so prioritization for some traffic means degradation for all the rest.[12] According to tests run by outside networking specialists, Comcast's fast lane for Xfinity traffic is operated over the same broadband infrastructure as the rest of the internet traffic Comcast carries and works by marking the relevant packets with different 'quality of service' (QoS) values in order to be moved to the front of the line ahead of the other packets.[13] Comcast has publicly admited to prioritizing traffic from its VoIP service on its broadband network and that Xfinity packets carry similar QoS markings (namely, 'DiffServ' or DSCP, for

'differentiated services code point'), but it claimed that they are not being used for prioritization.[14]

Comcast addressed the Xfinity prioritization issue on its corporate blog with what could not have been a more emphatic denial. In part, the post read,

> "There's also been some chatter that we might be prioritizing our Xfinity TV content on the Xbox. **It's really important to us that we make crystal clear that, in contrast to some other providers, we are not prioritizing our transmission of Xfinity TV content to the Xbox (as some have speculated). While DSCP markings can be used to assign traffic different priority levels, that is not their only application— and that is not what they are being used for here**" (yes, the bold and underlined emphasis is in the original).[15]

Despite the evidence uncovered to the contrary, Comcast insisted that the Xfinity Xbox app works just like a cable service and a set-top box: as an additional flow of traffic that does not interfere with the other bandwidth on the network.[16] In other words, Comcast claimed that it has not been prioritizing Xfinity over other internet traffic, because it is on its own dedicated piece of the pipe, separate from the internet logically if not physically. In this Comcast relied on a minute technicality in broadband infrastructure to justify its discriminatory actions, just like they did with not 'blocking' BitTorrent but just throttling it to the point of being effectively unusable.[17] Regardless of the details of how it gets there, however, Xfinity consistently performs better than competing streaming video apps on the Xbox— not to mention not counting against users' data caps.[18]

While such network discrimination definitely violates the principle of net neutrality, whether it actually violated the FCC's Open Internet rules is ambiguous at best— which speaks to just how ineffective the rules were in actually protecting net neutrality. Even though the 2010 Open Internet rules were eventually struck down, they remain specifically relevant to Comcast because the corporation is subject to them until 2017 as a merger condition put on its acquisition of NBC-Universal by the Justice Department in 2011.[19] The main reason why Comcast has been

able to evade net neutrality enforcement in regard to its data cap exemptions and traffic prioritization, though, is because the FCC's Open Internet policy only considers internet traffic, which leaves network operators like Comcast able to discriminate as much as they want on any network traffic that they separate from the internet. Yet again, network operators are able to avoid regulations by controlling the operative definitions of their technical practices: applying the DiffServ code point to an Xfinity video packet amounts to labeling those bits 'not the internet,' discursively constructing that traffic as out-of-bounds from net neutrality policy.

Namely, FCC Open Internet protections do not apply to 'specialized services' over broadband networks. Mentioned above as "differentiated services" and also known as "managed services," 'specialized services' share bandwidth on broadband networks with internet traffic but are considered separate from the internet.[20] Comcast's Xfinity is a prominent example of an existing specialized service— as are other cable providers' IPTV services and facilities-based VoIP services— and these broadband-based services devoted to specific types of traffic separate from the internet are the main focus of network operators' development of next-generation network infrastructure. That this is happening simultaneous to economic incentives and past practices pointing toward continued under-investment in network capacity expansion means that these specialized services will be competing for bandwidth on a narrow pipe— a situation not likely to go well for the less profitable open internet.

The discourse surrounding the specialized service issue is particularly revealing of broadband providers' troubling vision of the future of the internet— or, rather, 'the internets.' Similar to the distinction made by Google and Verizon that we saw in Chapter 4, Comcast's explanation of why it does not count Xfinity Xbox traffic on its data caps raised the specter of "public and private internets." The following could be found on Comcast's Frequently Asked

Questions page for its Xfinity Xbox app in 2012:

> Q: Will XFINITY On Demand content a customer views via the Xbox 360 go against their bandwidth cap?
>
> A: No, since the content is being delivered over our private IP network and not the public Internet, it does not count against a customer's bandwidth cap.[21]

Comcast quietly changed this answer on the FAQ page later from this "private network vs. public internet" explanation to the one mentioned above comparing the Xbox to a cable television set-top box.[22] However, even Comcast's new justifications rely on unsettling 'separate but equal' rhetoric: in Comcast's description of its differentiation of Xfinity traffic from internet traffic, the implication is that, although each gets its own track of broadband pipe, neither one is a fast lane.[23] Just like familiar claims of 'separate but equal,' however, this structure is not equal at all: even if we generously give Comcast the benefit of the doubt that it does not use prioritization labels on Xfinity packets to actually prioritize, the separation of its own traffic still results in preferential treatment. Just take a look at "the public internet" and Comcast's "private network:" one has congestion from other growing traffic on the network, the other is unencumbered; one has rules of the road for the protection of users, the other is unregulated; one has restrictions on the amount of data that can be used, the other is subsidized to the user; one has dwindling investment in expansion, the other has strong incentives for growth. This separate but unequal future of the internet has been described in the terms of what net neutrality advocates have called 'the dirt road scenario:' with the incentives to under-invest in network capacity discussed above, the size of the pipe overall is likely to remain the same and with more profit coming to network operators from managing networks that content providers have to pay to gain priority access to, broadband providers have every reason to devote ever more capacity to the private portion of the pipe as a fast lane— squeezing out the public internet in the process.[24] Those in the slow lane could still reach end-users, but without being affiliated with a large media

conglomerate or paying for access to the fast lane, they would be disadvantaged and pushed to the margins as more lanes get devoted to specialized services.

Specialized services are a particularly worrisome consequence of weak net neutrality policy because they represent a way of building inequality into the network infrastructure itself. My concern here ultimately goes beyond Netflix or any other innovative online service that is disadvantaged by network discrimination— the battle over net neutrality is too often reduced in the public sphere to a matter of how fast one's streaming video loads. The more important issue is the splintering of the internet into public and private networks and how broadband providers can create two classes of internet users in the process. The divide and conquer attitude and disciplining of the open circulation of uploading and downloading on users' own terms makes it more difficult to create and share new things for everyday people. These are consequences of the ways in which the rules have allowed technological structures to be reshaped on a more closed basis. Similar consequences come also with the way that industrial structures have shifted in the aftermath of the FCC Open Internet policy— the subject to which we will now turn.

Shaping the industry: Pay-for-play business models

> How do you think they're going to get to customers? Through a broadband pipe. Cable companies have them. We have them. Now what they would like to do is use my pipes free, but I ain't going to let them do that because we have spent this capital and we have to have a return on it. So there has to be some mechanism for these people who use these pipes to pay for the portion they're using. Why should they be allowed to use my pipes? The Internet can't be free in that sense, because we and the cable companies have made an investment and for a Google or Yahoo! or Vonage or anybody to expect to use these pipes free is nuts!
> — Ed Whitacre, former AT&T CEO (2005)[25]

If there was such a thing as an actual declaration of war to incite the net neutrality battle, the quote in the epigraph above was it. In a 2005 interview, Ed Whitacre, who at that time was about

to become the CEO of AT&T after leading a successful merger with the company and his own SBC, signaled his intention to institute a new set of business practices in the provision of broadband service, involving charging online content providers for the ability to "use [his] pipes." This vision— what we might call 'the Whitacre toll' on internet traffic— was something that network operators had been working toward for years. Even though Whitacre himself would be gone from the company before he could oversee its actual implementation, AT&T did fulfill this plan by 2013— although not in quite as direct a way as indicated above. Nonetheless, led by AT&T, a new business model of pay-for-play in broadband service provision would take hold, pointing the way toward a post-net-neutrality telecom industry. That this took place in the wake of the FCC's implementation of the Open Internet Order indicates just how weak the rules were— even though they ostensibly protected net neutrality and were meant to curb network discrimination, broadband providers nonetheless began constructing new business models based entirely on unfair prioritization and preferential treatment of online content. That this took place in the midst of the rules falling apart in federal appeals court only smoothed the way for the direction that the industry was already headed in.

This section considers how the reception of the Open Internet rules worked to reshape the industrial practices of broadband network operators through a case study of AT&T's Sponsored Data model. The Sponsored Data program for mobile broadband service is where mobile app providers pay AT&T for the traffic generated by that app to not count against its users' monthly data usage.[26] Sponsored Data is a particularly vivid example of unfair industry practices arising in the absence of meaningful net neutrality protections, as it is a business model that not only presumes discrimination in online traffic but is specifically set up to profit from it. We will see how this model is problematic as a form of pay-for-play, where the broadband bottleneck

becomes a site of toll collecting to reach users and broadband providers take up the role of gatekeeper of online content circulation.

What Whitacre was referring to above was implementing what economists call a 'two-sided market' and what one Wall Street analyst has called the "the holy grail for wireless operators."[27] As explained in the Introduction, retail broadband subscribers already pay network operators for the bandwidth they provide, but network operators are trying to add revenues from the other side by seeking payments from the online content and application providers that want to reach those subscribers. Broadband network operators see a more profitable role for themselves as a distribution middleman for valuable commercial media content, rather than simply acting as a dumb pipe that just passes traffic from one end-user to the other regardless of those users' ability to pay extra. So, in creating a two-sided market, broadband providers seek to take advantage of their bottleneck position within network infrastructure in order to collect tolls from those distributing online content that simultaneously allows them to charge twice for the same bandwidth and narrow down the circulation of network traffic to those who can pay up. Essentially, the Whitacre toll— a 'termination fee' in telecom law lingo— is imposed on online traffic as it exits the off-ramp of the internet (after its providers' already paid to send it over the on-ramp). Rather than charging this toll as an arbitrary fee to all traffic that comes across its broadband networks to reach end-users, through the Sponsored Data program AT&T imposes these charges as a form of prioritization— exempting that traffic from users' data caps.

To understand the incentives in place to make a Sponsored Data model work, we ought to briefly discuss the dynamics of broadband data caps. Data caps— also known as 'usage based-billing' or 'data tiers'— arose in broadband service around the mid to late 2000s in the US, after being widely implemented and controversial in other countries, most notably Canada (Crawford

2013). They were particularly taken up in the naturally capacity-limited context of wireless spectrum, such as AT&T's mobile broadband network, and as a "protocol agnostic" alternative to application blocking and throttling on Comcast's cable broadband network. We saw in Chapter 3 how the latter came about in the midst of the FCC's investigation of Comcast's blocking of BitTorrent and we also saw in this chapter how the company's use of data caps has played into its work to reshape internet infrastructure. Data caps typically work as limits on the total amount of internet traffic that a broadband customer can use in a month without having that traffic throttled or incurring extra charges. These plans obviously differ significantly from the early model of broadband internet access, where it was taken for granted that one could use as much internet content as one wanted. Data capped plans are more akin to dialup internet access, except charges are based on the megabyte (MB) or gigabyte (GB) used and not the minute or hour. Nonetheless, data caps are increasingly becoming the norm by the time of this writing, for both wireless and wired internet access. Justifications given by broadband providers for the implementation of data caps have typically focused on the necessity of alleviating network congestion— there is only so much bandwidth available on a network, especially in the case of limited wireless spectrum, and networks operators have to use it efficiently. However, congestion on broadband networks has nothing to do with the total amount of data users use in a month— congestion happens on a place-by-place and hour-by-hour basis, so 'managing' congestion through monthly data caps makes little sense.[28] Rather, network operators seek to create new revenue streams from users paying overage fees and content companies paying fees to not have the data they send to their customers count against the cap— a way to more directly tap into the high-growth area of mobile apps and maximize average revenue per user.[29]

Data caps raise a number of troubling issues related to the "disciplining" of internet usage.

Michael Powell— whom the reader may remember as the Chairman of the FCC who was responsible for the classification of broadband as an information service in the early to mid 2000s— is at the time of this writing the head of the NCTA, the cable industry's trade group (because, well, of course he is). Powell explained data caps this way in 2013: "If you have an unlimited pricing model, you can basically say: 'I can build an app or a service and I don't really concern myself with how much bandwidth consumption it will take...' There is no disciplining element."[30] This is telling language, which is similar to Whitacre's in its implication of property ownership and the desire to control everyone else's use of that property— you may be allowed to use their pipes, but only in properly disciplined ways. This discourse of broadband networks as private interests— property which gives its owners the ultimate right to determine its uses— opposes a discourse of broadband as a fundamental public resource that people require the use of to communicate and connect. This discourse of "discipline"— which echoes the way that AT&T talked similarly about "educat[ing]" its customers to "modify their usage"— also speaks to data caps as a means of limiting, and encouraging self-limiting, creation and circulation practices online.[31]

My primary concern with data caps in this dissertation, however, is the ways they create conditions used to give preferential treatment to some uses of the internet over others. Data caps, even though they were allowed under that Open Internet rules and are even blessed by the FCC,[32] are not neutral— because not everyone's data is being capped and those who can pay up get the advantage. Discrimination can become the basis for a whole new business model in broadband when developers who can pay to have their app given data-cap-exempt status are favored over those who cannot.

AT&T's Sponsored Data plans were brewing behind the scenes in reception to the FCC's

Open Internet policy and were publicly unveiled shortly thereafter. In 2012, not long after the Open Internet rules officially took effect in late 2011, reports revealed that AT&T was in talks with a few providers of data intensive mobile applications to have those companies foot the bill for their users' use of those apps.[33] Comparing the model to calling toll free 1-800 numbers or free shipping in the retail market, AT&T pitched the idea to app providers as a way to ensure that, in a data-capped wireless environment, users will continue to use streaming video and music apps on their smartphones and tablets without worrying about the amount of data they use— for those apps that pay for this privilege, at least.[34] For their part, the two other major mobile providers, Verizon and T-Mobile, have also publicly expressed interest in pursuing similar models.[35] Sponsored data models are common in other countries that have lacked strict net neutrality protections, including the UK and Germany in the years before stronger EU regulations have taken hold.[36] The content company in the US that is leading the way in subsidizing the costs of users' traffic is Amazon, which since 2007 has paid AT&T for Kindle users to be able to download ebooks on the devices without being charged for the data usage. Beginning in 2012, ESPN has been in talks with AT&T about sharing a portion of the advertising revenue generated by apps like its WatchESPN in exchange for exempting that traffic from the network's data caps.[37] The sports media juggernaut has a massive user base that generates a great deal of traffic, making ESPN exactly what AT&T is looking for in such dealings: as many of its users hit their data caps and stop streaming video, ESPN has incentives to pay up if it wants to keep its content flowing and it has the deep pockets to be able to do so.[38] AT&T publicly announced its Sponsored Data program in early 2014, coming forward with a short list of participating companies.[39] This actually did not immediately include ESPN, while Amazon has been rumored to be AT&T's first major partner in the program.[40]

While having content providers defray the costs of using their apps seems like an appealing prospect from a user perspective, it is problematic for the implications of how the internet works and especially for anyone outside of a consumer role, including everyday end-users. To begin with, while it may appear cheaper on the surface, is not likely to actually reduce costs for users overall, as the extra charges that app developers incur are typically passed back onto users, either opaquely within the price of the service or through additional advertising— there is no such thing as a free lunch. For instance, Amazon covers the data usage charges from AT&T associated with downloading ebooks to a Kindle, but then builds that cost into in the price of the ebook itself.[41] Beyond this, such a pay-for-play scheme puts user-led creation and circulation at a disadvantage compared to large established content and app providers who can afford to pay the protection money. The real net neutrality concern here is not that massive corporations like ESPN or Amazon would have to pay more for their traffic to reach users, but, rather, how pay-for-play actually tilts the playing field in their favor— an app that is data-cap-free is automatically more attractive than a competing one that is not, regardless of the actual quality of either, putting smaller operations with less cash at a disadvantage. The Whitacre toll raises the barrier to entry by forcing a new market entrant to effectively buy access to its customers from the network operator before it can distribute to them.[42] While the impact would be immediately felt by content providers who are put at a disadvantage if they cannot afford to pay such fees to network operators, it also reveals just how little we can take seriously the claims that anyone can create something and reach a sizable audience online— there is no level playing field where little guys can beat big guys by simply building a better product when some can simply pay for this form of priority. If such a model became normalized, it would mean that smaller ventures would be marginalized and everyday internet users would be further circumscribed to a consumer

position.

Even as it institutes a new system of network discrimination, the Sponsored Data model did not run afoul of the Open Internet rules, which further shows just how weak the FCC's regulations were. As discussed in Chapter 5, under the Open Internet Order, the FCC applied a different set of rules to wireless networks, which allowed mobile broadband providers like AT&T to discriminate against content and applications on its network, so long as they do not come from direct competitors, such as voice or video telephony apps like Skype. Further, although the Order did state the Commission's unease about pay-for-priority schemes, the Sponsored Data model involves an indirect enough form of prioritization that it would be unlikely to be outlawed under such rules. That is, the form of prioritization is not faster speed for network traffic, but a form of exemption from user data charges. Further, the payment is construed in such a way as to make it seem like a good deal for app providers to get around data caps, even though it is network operators who have created the situation where this shakedown seems desirable in the first place. What the Open Internet rules have to say about such a model became a moot point anyway, because not long after they were struck down in federal court, leaving AT&T to do what it pleased anyway.

With Sponsored Data, selective enforcement of data caps is used by AT&T as a gatekeeping mechanism, through which it can pick winners and losers based on who is able and willing to pay for play. One real reason why broadband providers implement data caps, as Harold Feld, Philip Dampier, and other net neutrality advocates have argued, is to create and ration artificial scarcity through arbitrary limits on content usage, which can be exploited by ginning up user fear of going over their caps that makes exempt apps more attractive and therefore worth paying for from developers' perspective.[43] The end game of this is to raise the

barriers to entry in the online content and application market such that network operators can set up stable and reliable dealings with a small number of large corporations able to pay the Whitacre toll as a regular part of their distribution business and the unruly circulation of unprofitable user-generated content and apps dries up as users are disciplined into familiar consumer roles. Content and services from other smaller businesses and everyday internet users would still be able to reach end-users under this model but, especially as such schemes become more common and users get used to having their data paid for, this sort of prioritization could become a *de facto* gatekeeper toll as it works to marginalize anyone who does not pay extra.

The weakness of the Open Internet rules left the door open to a new post-net-neutrality world of prioritized, subsidized, and unlimited traffic for some and the leftovers for others. We saw this above in how the industrial arrangement and technical infrastructure of broadband shifted as a result of the regulatory decisions of the FCC traced in previous chapters. With unequal treatment through business practices and even increasingly built into the infrastructure of internet access networks themselves, the period following the Open Internet Order's implementation in 2011— a period when 'net neutrality' was supposed to be the rule of the road— an inequitable and unjust broadband system worked to favor distribution for those who can pay more and squeeze out circulation for the rest of the internet. It was bad enough with weak rules on the books, but not long after, even those rules were gone. Let us move now to the Conclusion, where we will see how the core of the Open Internet rules were struck down in the *Verizon* case in early 2014, some of the dangers this represents for free speech online, and how the fight is beginning all over again.

Notes

[1] "Specialized Services: Summary of Findings and Conclusions." Specialized Services Working Group, Open Internet Advisory Committee, FCC, 20 August 2013.

[2] The single mention of net neutrality in all of *Spreadable Media* is a massive and rather obvious understatement: "And yet, as these gains are made, struggles will only intensify over questions of access— particularly for net neutrality— making debates about corporate constraints on access networks, and the uses of them, ever more crucial" (Jenkins et al.: 162). I appreciate that Jenkins acknowledges his awareness of the issue, but it would be better to more substantively address just how crucial this struggle is for the existence of the opportunities he celebrates is.

[3] For more on how cable operators came to dominate the broadband market and the consequences of this, see Susan Crawford (2010, 2012).

[4] For a useful explanation of the technological infrastructure of cable and DSL broadband, see Nuechterlein and Weiser (2010): 140-147.

[5] Uploads speeds matter for how users can contribute to the circulation of communications and culture. Crawford explains it this way: "In particular, cablecos and telcos want to have enough bandwidth to sell their own movies. The last was cited by Cisco's chief cable architect as the reason DOCSIS 3.0 is designed for 1 gig down, 100 meg up, where the technical constraints are irrelevant. The cablecos make money on various downloaded services (e.g., Video On Demand) but not on anything consumers upload. Because the backhaul (the internet backbones) are symmetric and more traffic goes downstream, the additional cost of giving every customer greater upload speeds is negligible" (2009).

[6] Orland, Kyle. "Comcast: Xbox 360 On Demand Streams Won't Count against Data Caps." *Ars Technica*. 26 Mar. 2012. Web. 10 July 2014. http://arstechnica.com/gaming/2012/03/comcast-xbox-360-on-demand-streams-wont-count-against-data-caps/.

[7] Hastings, Reed. "Comcast No Longer following Net Neutrality..." *Facebook*. 15 Apr. 2012. Web. 10 July 2014. https://www.facebook.com/reed1960/posts/10150706947044584.

[8] Ibid.

[9] Catan, Thomas, and Amy Schatz. "U.S. Probes Cable for Limits on Net Video." *The Wall Street Journal*. 13 June 2012. Web. 10 July 2014. http://online.wsj.com/news/articles/SB10001424052702303444204577462951166384624.

[10] Gustin, John. "U.S. Probe of Comcast, Broadband Giants Echoes 'Net Neutrality' Battles." *TIME*. 14 June 2012. Web. 10 July 2014. http://business.time.com/2012/06/14/u-s-probe-of-comcast-broadband-giants-echoes-net-neutrality-battles/.

[11] Some network infrastructure specialists, including from Level 3, ran some tests that showed that Comcast was prioritizing Xfinity traffic to the Xbox. See: Rayburn, Dan. "Comcast Prioritizing Their Video Content Over Competitors Traffic, Here's The Proof." Blog post. *StreamingMediaBlog*. 7 May 2012. Web. 10 July 2014. http://blog.streamingmedia.com/2012/05/comcast-traffic.html; Berg, Brian. "Observing Traffic Prioritization in Comcast's Network." Blog post. *Berg'd*. 13 May 2012. Web. 10 July 2014. https://ber.gd/2012/05/13/comcast-traffic-prioritization/; Dugan, Andrew. "An IP Engineer and Consumer View of Xfinity Traffic Prioritization." Blog post. *Beyond Bandwidth*. Level 3, 17 May 2012. Web. 10 July 2014. http://blog.level3.com/internet-broadcast/an-ip-engineer-and-consumer-view-of-xfinity-traffic-prioritization/; Farivar, Cyrus. "Extra Lane: How Comcast Assures That Xfinity TV on Xbox 360 Works Well." *Ars Technica*. 22 May 2012. Web. 10 July 2014. http://arstechnica.com/tech-policy/2012/05/extra-lane-how-comcast-assures-that-xfinity-tv-on-xbox-360-works-well/. There was some dispute over whether Comcast was, in fact, prioritizing Xfinity packets. See: Higginbotham.

"The Technical and Legal Realities of Comcast's Xbox Cap Spat." *Gigaom*. 27 Mar. 2012. Web. 10 July 2014. http://gigaom.com/2012/03/27/the-technical-and-legal-realities-of-comcasts-xbox-cap-spat/. However, I assert, it does not actually matter whether it was prioritization in the technical network engineering sense of the term, because it still goes against net neutrality principles by giving unequal treatment through separating out its own favored traffic.

[12] Sottek, TC. "Is Comcast Prioritizing Its Xfinity App over Competitors like Netflix?" *The Verge*. 15 May 2012. Web. 10 July 2014. http://www.theverge.com/2012/5/15/3021839/comcast-throttling-net-neutrality-xfinity-netflix-xbox.

[13] Rayburn, "Comcast Prioritizing…" http://blog.streamingmedia.com/2012/05/comcast-traffic.html; Berg, "Observing Traffic Prioritization…" https://ber.gd/2012/05/13/comcast-traffic-prioritization/; Dugan,"IP Engineer and Consumer View..." http://blog.level3.com/internet-broadcast/an-ip-engineer-and-consumer-view-of-xfinity-traffic-prioritization/.

[14] Farivar, "Extra Lane," http://arstechnica.com/tech-policy/2012/05/extra-lane-how-comcast-assures-that-xfinity-tv-on-xbox-360-works-well/; Sottek, "Is Comcast Prioritizing…" http://www.theverge.com/2012/5/15/3021839/comcast-throttling-net-neutrality-xfinity-netflix-xbox.

[15] Werner, Tony. "The Facts about Xfinity TV and Xbox 360: Comcast Is Not Prioritizing." Blog post. *Comcast Voices*. Comcast, 15 May 2012. Web. 10 July 2014. http://corporate.comcast.com/comcast-voices/the-facts-about-xfinity-tv-and-xbox-360-comcast-is-not-prioritizing.

[16] Ibid.

[17] Higginbotham. "Level 3 Concurs: Comcast Appears to Be Prioritizing Traffic." *Gigaom*. 17 May 2012. Web. 11 July 2014. http://gigaom.com/2012/05/17/level-3-concurs-comcast-appears-to-be-prioritizing-traffic/.

[18] Sottek, "Is Comcast Prioritititizing…"

[19] Modified Final Judgment, *US v. Comcast*, 76 Fed. Rcd. 34750, http://www.justice.gov/atr/cases/f274700/274713.pdf.

[20] Third Meeting, Specialized Services Subgroup, Open Internet Advisory Committee, FCC, January 2013, Stanford, CA, http://transition.fcc.gov/cgb/events/specialized-services.pdf.

[21] The page has been changed since then, but its 2012 version is accessible via the Internet Archive's Wayback Machine. See: "XFINITY TV FAQs." *Xfinity*. Comcast, 23 Mar. 2012. Web. 10 July 2014. http://web.archive.org/web/20120323223656/http://xbox.comcast.net/faqs.html.

[22] Here is what the page reads as of summer 2014:

"Q: Will watching XFINITY TV directly on my Xbox 360 use data from my XFINITY Internet monthly data usage allowance?

A: No; similar to traditional cable television service that is delivered to the set-top box, this content doesn't count toward our data usage threshold. The Xbox 360 running our XFINITY TV app essentially acts as an additional cable box for your existing cable service, and our data usage threshold does not apply." "FAQs: Xbox 360." *XFINITY TV*. Comcast. Web. 11 July 2014. http://xbox.comcast.net/faqs.html.

[23] Werner, "The Facts about Xfinity…"

[24] Higginbotham, Stacey. "FCC Will Probe Managed Services As Part of Net Neutrality Push." *Gigaom*. 21 Oct. 2009. Web. 11 July 2014. http://gigaom.com/2009/10/21/fcc-will-probe-managed-services-as-part-of-net-neutrality-push/.

[25] O'Connell, Patricia. "At SBC, It's All About 'Scale and Scope.'" *BusinessWeek*. 06 Nov. 2005. Web. 11 July 2014. http://www.businessweek.com/stories/2005-11-06/online-extra-at-sbc-its-all-about-scale-and-scope.

[26] Brandom, Russell. "Sponsored Data: AT&T Will Now Let Companies Buy out Your Data Charges for Specific Videos and Apps." *The Verge*. 6 Jan. 2014. Web. 11 July 2014. http://www.theverge.com/2014/1/6/5279894/at-t-announces-net-neutrality-baiting-sponsored-data-mobile-plans.

[27] Sharma, Amol, Spencer E. Ante, and Anton Troianovski. "ESPN Eyes Subsidizing Wireless-Data Plans." *The Wall Street Journal*. 9 May 2013. Web. 11 July 2014. http://online.wsj.com/news/articles/SB10001424127887324059704578473400083982568.

[28] One's neighborhood broadband network might get congested in the evening hours, but in the middle of the night it will not be; trying to connect to a mobile data network inside a football stadium during a game is difficult with tens of thousands of others around, but doing the same the day after the game would be no problem. The congestion issue is a time and place issue, not a matter of whether individual users happen to download 5 GB of data over the course of the month rather than 4.

[29] By 2013 the smartphone market had become saturated enough that mobile providers could not count on adding mobile data subscriptions for revenue growth—smartphone penetration is growing remarkably fast, reaching over 60% by 2013. See: *Mobile Majority: U.S. Smartphone Ownership Tops 60%*. Rep. Nielsen, 6 June 2013. Web. 11 July 2014. http://www.nielsen.com/us/en/insights/news/2013/mobile-majority--u-s--smartphone-ownership-tops-60-.html. While the numbers of new mobile broadband subscribers began to slow down, the amount of data used by existing subscribers continued to skyrocket— the amount of mobile data traffic in North America grew by 77% in 2013 alone, with projections for a compound annual growth rate of 50% each year until 2018. See*: Global Mobile Data Traffic Forecast Update, 2013–2018*. Visual Networking Index. White Paper. Cisco. 5 February 2014. http://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/white_paper_c11-520862.pdf. With data usage growing so quickly, mobile providers' focus began to shift to ways to charge by the amount of data used. All of this works by maximizing the return on the investment made in the existing infrastructure and squeezing as much as possible out of those sunk costs without having to make new investments in network infrastructure.

[30] Eggerton, "NCTA's Powell: Usage-Based Pricing About Fairness, Not Capacity," *Broadcasting & Cable*, 17 January 2013, http://www.broadcastingcable.com/article/491396-NCTA_s_Powell_Usage_Based_Pricing_About_Fairness_Not_Capacity.php.

[31] Svensson, Peter. "AT&T: Tighter Control of Cell Data Usage Ahead." *USA Today*. 9 Dec. 2009. Web. 11 July 2014. http://usatoday30.usatoday.com/tech/wireless/2009-12-09-att-phone-data_N.htm.

[32] Genachowski said he was "open to new pricing models" for broadband, seeing no problem from a net neutrality standpoint. See: Kang, Cecilia. "FCC's Pay-as-you-go Internet Plan Raises Video, Access Questions." *The Washington Post*. 08 Dec. 2010. Web. 12 July 2014. http://www.washingtonpost.com/wp-dyn/content/story/2010/12/07/ST2010120706947.html. How data caps have been used anticompetively, however, has been looked at in a Department of Justice investigation that is underway as I write. See: Catan and Schatz, "US Probes Cable…" http://online.wsj.com/news/articles/SB10001424052702303444204577462951166384624.

[33] Troianovski, Anton. "AT&T May Try Billing App Makers." *The Wall Street Journal*. 28 Feb. 2012. Web. 12 July 2014. http://online.wsj.com/news/articles/SB10001424052970204653604577249080966030276; Marek, Sue. "AT&T's Stephenson: Content Players Will Subsidize Consumer's Data." *FierceWireless*. 15 May 2013. Web. 12 July 2014. http://www.fiercewireless.com/story/atts-stephenson-content-players-will-subsidize-consumers-data/2013-05-15.

[34] Higginbotham. "AT&T's Mad, Mad Plan to Charge Wireless App Developers." *Gigaom*. 27 Feb. 2012. Web. 12 July 2014. http://gigaom.com/2012/02/27/atts-mad-mad-plan-to-charge-wireless-app-developers/.

[35] Troianovski, Anton. "T-Mobile Rethinks Pricing." *The Wall Street Journal*. 8 May 2012. Web. 12 July 2014. http://online.wsj.com/news/articles/SB10001424052702303630404577392430021839676; Goldstein, Phil. "Verizon, T-Mobile Promote Idea of 'toll Free' Data Plans." FierceWireless. 9 May 2012. Web. 12 July 2014. http://www.fiercewireless.com/story/verizon-t-mobile-promote-idea-toll-free-data-plans/2012-05-09.

[36] Meyer, David. "Deutsche Telekom Plans Over-the-top Partner Push, Building on Existing Deals with Spotify and Evernote." *Gigaom*. 6 Mar. 2014. Web. 12 July 2014. http://gigaom.com/2014/03/06/deutsche-telekom-plans-over-the-top-partner-push-building-on-existing-deals-with-spotify-and-evernote/; Patel. "AT&T's Sponsored Data Is Bad for the Internet, the Economy, and You." *The Verge*. 6 Jan. 2014. Web. 12 July 2014. http://www.theverge.com/2014/1/6/5280566/att-sponsored-data-bad-for-the-internet-the-economy-and-you.

[37] Sharma, Ante, and Troianovski. "ESPN Eyes Subsidizing..."; Goldstein. "Report: ESPN in Talks with U.S. Carrier on Toll-free Data Plans." *FierceWireless*. 10 May 2013. Web. 12 July 2014. http://www.fiercewireless.com/story/report-espn-talks-us-carrier-toll-free-data-plans/2013-05-10.

[38] Maloy, Simon. "ESPN Wants To Pay-To-Play." Blog post. *Media Matters for America*. 16 May 2013. Web. 12 July 2014. http://mediamatters.org/blog/2013/05/16/espn-wants-to-pay-to-play/194093.

[39] "Sponsored Data for Mobile Device." *AT&T*. Web. 12 July 2014. http://www.att.com/att/sponsoreddata/en/index.html#fbid=bwJD0rzj2Bu; "AT&T Introduces Sponsored Data for Mobile Data Subscribers and Businesses." *AT&T*. 6 Jan. 2014. Web. 12 July 2014. http://www.att.com/gen/press-room?pid=25183&cdvn=news&newsarticleid=37366&mapcode=; Brandom, Russell. "Sponsored Data: AT&T Will Now Let Companies Buy out Your Data Charges for Specific Videos and Apps." *The Verge*. 6 Jan. 2014. Web. 11 July 2014. http://www.theverge.com/2014/1/6/5279894/at-t-announces-net-neutrality-baiting-sponsored-data-mobile-plans.

[40] Fried. "Could Amazon Be the First Major Customer for AT&T's "Toll-Free" Data Service?" *Recode*. 17 June 2014. Web. 12 July 2014. http://recode.net/2014/06/17/could-amazon-be-the-first-major-customer-for-atts-toll-free-data-service/.

[41] "Toll-free Data: The Technical Details, the Business Model and the Skeptics."*FierceWireless*. 16 Aug. 2012. Web. 12 July 2014. http://www.fiercewireless.com/special-reports/toll-free-data-technical-details-business-model-and-skeptics.

[42] Higginbotham, "AT&T's Mad, Mad Plan…"

[43] Feld, Harold. "AT&T Poised To Fulfill Ed Whitacre's Vision? Charging Aps [sic] For Customers and The Future of Wireless." Blog post. *Tales of the Sausage Factory*. Wetmachine. 28 Feb. 2012. Web. 12 July 2014. http://www.wetmachine.com/tales-of-the-sausage-factory/att-poised-to-fulfill-ed-whitacres-vision-charging-aps-for-customers-and-the-future-of-wireless/; Dampier, Philip. "AT&T's Internet Overcharging Merry-go-Round — Billing App Makers for Your 'Overusage'." Blog post. *Stop the Cap!* 28 Feb. 2012. Web. 12 July 2014. http://stopthecap.com/2012/02/28/atts-internet-overcharging-merry-go-round-billing-app-makers-for-your-overusage/.

Conclusion

Democratic Communications and the Future of Net Neutrality

In this dissertation I have followed the history of net neutrality, the standard that all users and uses of the internet should receive equal treatment from network operators, and how it has eroded in practice, inspiring attempts to put the principle into policy. We have seen how the phone and cable companies that own and operate the physical infrastructure used to access the internet have worked to leverage their bottleneck position as the last mile of the network into gatekeeper control of what the network may be used to do, threatening to squeeze out the circulation of culture and communication from everyday users, and how the FCC's Open Internet policy in response has not done enough to stop this. Throughout, I have considered net neutrality as a discourse and a policy issue and focused on its implications for shaping emergent media infrastructure and, therefore, participation in communications and culture in the 21st century. The interacting dynamics of policy discourse, communications infrastructure, and the public sphere have been at the heart of this story. Featuring discursive analysis of the FCC's Open Internet regulations and the debates surrounding them, I have explored the politics of media policy and how they afford and delimit what people are able to do with emergent media technologies in the case of net neutrality. This dissertation has contributed to cultural theories of communications policy by shedding light on how discourse legitimizes and constructs media regulations, systems, and practices. It has also forwarded a conceptual framework that accounts for the political economic structures, technological infrastructures, and cultural practices that constitute media when they are new, with particular focus on the role of public policy in enabling and

constraining the possibilities of emergent media. The history traced here, I have argued, amounts to a struggle between *emergent media keywords*, including inclusion and participation, information and telecommunications, distribution and circulation, negative freedom and positive freedom, property and commons, and public values and private interests. This struggle has played out in the political choices of media regulation, determined by the power of policy discourse to define the legal, industrial, and technical structures of emergent media systems. This struggle also comes with great social and cultural implications, such as the shape of the online public sphere.

The *Verizon* case— referred to in a few places above, having occurred shortly before this writing was completed in early 2014— cut right to the heart of why discourse is so important to media policy: only with broadband properly defined as a telecommunications service can the FCC acknowledge and properly enforce the common carriage principles that form the bedrock of net neutrality. In this Conclusion I will undertake some analysis of the case and the implications for the discursive construction of freedom of speech and democratic communications online felt in its aftermath. Following that, I will close with some thoughts on the next steps for net neutrality, weighing in on its possibilities as a discourse and a policy, and the next steps for my own research on this topic. Before we get to that, though, I must provide an update to the situation with net neutrality policy in the US since the core time period explored in this dissertation.

In many ways, the same battles discussed throughout this dissertation are being replayed as I complete this writing, with the same keywords at the heart, all dependent on the power of definition in policy discourse, and with the same power to shape the future of the internet. We saw above how the FCC turned its back on common carriage for internet infrastructure beginning

in 2002 under Michael Powell and Kevin Martin and lacked the will to correct this mistake in 2010 under Julius Genachowski. Following the *Verizon* decision in early 2014, the FCC under newly appointed Chairman Tom Wheeler has been afforded another opportunity to do it right this time. With the Open Internet rules no longer in existence simply because they are based in common carriage principles which cannot be applied unless the broadband services they apply to are labeled 'telecommunications services,' Wheeler can do what his predecessors should have done in order to protect the openness of the internet. It would be simple— just recognize that net neutrality is based on common carriage and define broadband as 'telecommunications'— but, of course, may not be easy. As this new round of the battle begins just as I wrap up this dissertation, the relevance of this project is made all the more clear: an understanding of this history can help us figure out how to see to it that it does not go the same way again.

A new battle and a great furor have quickly risen up around Wheeler's proposal for new Open Internet rules, in the wake of the *Verizon* decision that effectively gutted the previous policy.[1] The 2010 Open Internet regulations were as close as the US has come to meaningful net neutrality policy, with prohibitions against blocking and discriminating against content, applications, services, and devices on the internet, but all of this was struck down by the DC Circuit Court in the *Verizon* decision. The plan now being considered by the FCC would undermine rather than protect the open internet, as it would support ISPs operating private fast lanes for prioritized network traffic and charging content providers extra tolls to reach users.

The reports of net neutrality's death, however, have been greatly exaggerated— or at least premature. Yes, the heart of the FCC's old Open Internet rules was torn out in the *Verizon* case and Chairman Wheeler's plan for new rules would corrode rather than protect net neutrality. Things look bad— but as of this writing nothing is settled yet.[2] With fits and starts, net neutrality

is gaining momentum in other countries and in transnational governance, a contrast that could serve as leverage in the US debate.[3] There are also other avenues for implementing net neutrality in the US, such as merger conditions on a possible acquisition of Time Warner Cable by Comcast or as antitrust action in the online video market as is being considered by the Justice Department (although both of these come with severe tradeoffs by not addressing the larger issues of industry concentration and market structure).[4] And the FCC's new Open Internet proceeding is only just beginning as this dissertation is being completed in the summer of 2014.

I maintain that, for all the problems pointed out throughout this dissertation, the FCC remains the most important venue to address net neutrality within the US— but, regardless of the agency also calling its 2014 proposal "Open Internet protections," just as with the 2010 rules, it is not net neutrality.[5] The new Open Internet proposal would only stop preferential treatment that is deemed "commercially unreasonable"— conditions based in the private interests of the marketplace, not the public values of democracy. Wheeler's Open Internet plan explicitly allows for the discriminatory models of pay-to-play and specialized services detailed above and deals with violations only on a case-by-case basis after the fact, not to mention that it still does not extend proper protection to mobile broadband networks.[6] As I have argued, the root of the whole net neutrality problem at the FCC— underlying both the old Open Internet rules and now the new— is the agency's definition of broadband as an information service, which prioritizes the private property rights of ISPs over the public free speech rights of users. This is an analogous situation to the earlier decisions to license the wireless spectrum as a quasi-property right and regulate cable networks as resources for top-down systems of broadcasting and not two-way communications. The FCC's current information service framework for broadband regulations not only enables but also— as confirmed by the DC Circuit in the *Verizon* case— presupposes

discrimination.[7] Net neutrality is fundamentally based in the universality and nondiscrimination tradition of common carriage but, unless it reclassifies broadband within the telecommunications service framework, the FCC legally cannot treat ISPs as common carriers. Therefore, no matter what Open Internet rules the FCC passes, there will be no meaningful net neutrality without reclassification as common carriage. As we have seen, reclassification and a strong version of net neutrality is what many advocacy groups have been pushing for all along and they are undertaking a major new campaign to engage the public in the process in support of this. Massive citizen pushback has followed, with over a million public comments submitted to the new proceeding and even protest occupations of the FCC offices in Washington. Future versions of this project will pick up the story where I leave off here. But I would like to provide some analysis of the *Verizon* decision that led to this.

Verizon v. FCC *and the end of the Open Internet rules*

Evident through the course of this dissertation, the stage for the legal challenge to the FCC's Open Internet rules was set long before the Order was adopted in 2010. After the rollercoaster of the *Comcast* case— the huge victory for users over the egregious abuses of Comcast, followed by the emphatic statement that the ability of the FCC to enact such protections was a mirage and the new realization that any new net neutrality enforcement under the existing framework was virtually impossible— the FCC was forced to confront the reality that it may have deregulated itself out of existence. In the midst of attempting to deliver the Obama campaign promise of net neutrality policy, FCC Chairman Genachowski inherited the terrible decisions led by the Commission under the Bush administration leadership of Chairmen Powell and Martin— but he was ultimately content to sell short on the Open Internet rules in the face of the firefight the

Commission faced if it was going to take on reclassification. This lack of political will for reclassification sealed the fate of the enforceable net neutrality regulations when they came to be tested in court. Even in the face of these doubts over its statutory authority to regulate broadband, the FCC went ahead with implementing the Open Internet rules within the Title I legal framework. To the surprise of no one, the Commission was sued to overturn the Open Internet rules; to the surprise of perhaps some, that legal challenge came from the company that helped write the rules: Verizon.

Despite being perhaps the strongest influence on the text of the actual rules as adopted (as shown in Chapter 4), Verizon was quite ardent to see the FCC's Open Internet rules done away with. Actually, Verizon was so excited to challenge the rules it wrote that it sued to overturn them in January 2011, the month after they were passed— even though they were not even officially enacted yet. Because US government regulations are not technically in existence until they are printed in the Federal Register, Verizon's initial appeal was thrown out of court for jumping the gun— but when the rules became official in September 2011, Verizon sued again the very next week.[8] It was not the rules themselves that Verizon took issue with, it was the fact that the FCC dared pass them: as discussed in Chapter 4, the Googizon rules were intended to be a legislative framework and when they were implemented by the FCC without the intervention of Congress, Verizon worried that they could become the basis of new authority for the Commission over broadband providers.[9] When the possibility of reclassifying broadband under Title II arose, Verizon argued to the FCC that that would be unnecessary because Title I still allowed the Commission enough authority to enforce openness rules even in the wake of the *Comcast* decision and that the Open Internet rules as written were the better alternative because they were not common carriage regulation.[10] Once the Open Internet rules were put in place,

though, Verizon promptly sued on the basis that the FCC lacked the authority it needed under Title I and that the Open Internet rules veered too far into the common carriage territory reserved for Title II.

The case that Verizon made against the Open Internet rules before the DC Circuit Court of Appeals proceeded primarily on three fronts and all three came back to those contested key terms of power I have followed throughout this dissertation: 'information' and 'telecommunications.' The first argument, following the winning strategy of Comcast, challenged the FCC's legal authority to regulate broadband providers at all. The second argument asserted that the Open Internet rules were essentially dressed-up common carriage rules of exactly the sort that information services, including broadband according to FCC definitions, are statutorily exempt from. The third argument was that the Open Internet rules were unconstitutional violations of broadband providers' First and Fifth Amendment rights. We will take a look at these first two points next; the third comes with sweeping implications for free speech that warrant their own discussion in the next section.

Verizon first argued that the FCC did not have the statutory authority to implement regulations on broadband providers. After the FCC was utterly decimated on this point in the *Comcast* decision, which came from the same court hearing the *Verizon* case, coming back to it seemed to be beating a dead horse— with the Commission as the horse. However, the FCC took a slightly different tack this time around: with the *Comcast* case leaving no room to proceed on the grounds of 'ancillary authority' over broadband (as explained in Chapter 3) the Commission argued that it actually had direct authority given to it by Congress.[11] The FCC had conceded during the *Comcast* case that it did not have any direct authority over broadband— a fact that Verizon was not about to let the agency forget— but all of a sudden the Commission had found

several provisions in the statute that it at that point was inclined to see as explicit grants of authority.[12]

The FCC presented a hodgepodge of individual sections of Title I to the court as justification for its broadband regulation and explained that it did not present these in its defense during the *Comcast* case because things had changed and as a result it had changed its reading of the statute. The provision that the FCC pointed to as the core of its mandate to regulate broadband was in Section 706 of the Telecommunications Act, which covers encouraging investment in broadband infrastructure.[13] To explain how rules protecting equality and nondiscrimination online were relevant to infrastructure deployment and improvement, and therefore authorized under Section 706, the FCC reached quite a bit: based on its view of what the Open Internet Order referred to as the "virtuous cycle of innovation" (discussed in Chapter 5), the Commission argued that rules ensuring openness drive creation and innovation in content, services, and applications, which encourages demand for broadband, which provides incentives for broadband investment.[14] If that was not enough, the statute states that the FCC is only authorized to intervene if it can show that broadband is not "being deployed to all Americans in a reasonable and timely fashion," and each study that the FCC had conducted up to the point of the Open Internet proceeding had somehow managed to show market forces alone providing broadband sufficiently.[15] So, right before the Open Internet rules were issued, in a clear attempt to shore up its convoluted strategy to proceed under Title I, the FCC released a study finally showing that broadband deployment was not sufficient and that it had to intervene.[16] While it was a bit obvious that this was a crudely instrumentalist way to get the job done however it could, the FCC recognizing that the deployment of high-speed internet access is not happening (which it actually had not been since the removal of open access regulation via Title I

classification in 2002) was long overdue. Further, the shift was supported by a very reasonable change in the FCC's definition of broadband: consistent with the actual experiences of internet users in the age of streaming video, filesharing, and other high-capacity uses of the internet, the FCC finally raised the speed it defined broadband from 200 Kbps up to 4 Mbps (which remains barely adequate for these high-capacity uses).[17]

Verizon picked the same fight that Comcast did regarding regulatory authority, with much reason to be confident that the FCC would lose on this point just as badly as it did before— with the same lawyer making essentially the same argument before some of the same judges. Although the FCC forwarded a slightly different argument for its authority in response to Verizon's challenge, it was clear after the *Comcast* verdict that the FCC had painted itself into a deregulatory corner by classifying broadband as an information service and then insisting on relying on the very limited authority that came with it under Title I. This meant that, however different the argument it was taking for a test drive this time around, the Commission had a hard road ahead of it by choosing to stay on the same route. The audacity (bordering on insanity) of this strategy was not lost on the DC Circuit: the majority opinion wrote, "even a federal agency is entitled to a little pride," in what comes as close as a federal appeals court gets to a zinger.[18]

Amazingly, however, the FCC scored an unlikely victory on the question of regulatory authority. In its brief before the court, Verizon likened the FCC's borderline-convoluted defense to a "triple-cushion shot," but the DC Circuit pointed out that in billiards it does not matter how much of a stretch a shot is if the player actually makes it.[19] And the court found that the FCC actually made its shot: the majority ruled that the FCC does, in fact, have authority to regulate broadband, inasmuch as it relates to the encouragement of investment in broadband infrastructure.[20] Two out of the three judges on the DC Circuit panel bought wholesale the

argument the FCC was selling, finding in full agreement with the FCC's view of the "virtuous cycle of innovation" and its relation to regulation of network management practices.[21] Rather than further stomping on the remaining tiny bits of its authority, as many legal observers expected, the DC Circuit handed over to the FCC a shiny new gift of broadband authority under Section 706 of Title I. The court seemed to show some recognition of the consequences of its prior *Comcast* decision for the future of the internet and it acknowledged the importance of FCC oversight for broadband. Indeed, the majority went out of its way to affirm the necessity of regulations to curb abuses of power by broadband providers and make clear that it was not ruling against net neutrality.[22] The court found that the Open Internet rules were sound and legitimate— but nonetheless struck them down, on the basis of the regulatory terminology used.

The DC Circuit's decision came down to Verizon's second point regarding common carriage. Verizon argued that in requiring universal and nondiscriminatory access to all the content on the network, the Open Internet rules treated broadband providers as common carriers. This would be in direct violation of the Communications Act, because the FCC can only enforce common carriage on services classified under Title II of the Act and, as discussed at length above, broadband services have been classified under Title I since 2002. Verizon pointed out how the Open Internet rules' provisions against blocking or discriminating among content, services, applications, and devices compelled broadband providers to carry the traffic of all users and at a mandated price of zero— a regulatory regime essentially identical to common carriage.[23] Title I of the Communications Act, however, establishes rights for information services to exclusive control of the content they make available and so explicitly forbids common carriage for any service defined that way.[24] In making this argument, Verizon relied on the precedent set in the *Midwest Video II* Supreme Court decision, discussed in Chapter 1, which invalidated

public access requirements on cable operators on the same grounds of requiring common carriage of services not defined as common carriers at the Commission.[25]

Verizon's argument on the common carriage point was a very strong one: net neutrality essentially is common carriage and, following its disastrous 2000s classification decisions, the FCC cannot treat broadband providers as common carriers, leaving net neutrality regulations untenable on that legal foundation. As we saw from Chapter 3, there is no doubt that net neutrality is little more than a digital update to common carriage. Indeed, the 'net neutrality = common carriage' point has been prominently pressed by both advocates of and detractors to net neutrality, albeit with differing value judgments— even Wu, the inventor of the phrase in the first place, has said that was his intention all along.[26] That the FCC had to go to court and make the hollow argument that the Open Internet rules are not actually like common carriage was a perverse consequence of the underlying regulatory terminology it foolishly insisted on maintaining— or, perhaps, a recognition that the Open Internet rules were never real net neutrality in the first place (a point that can be taken from Chapter 6). The decision of the FCC to not change its definition of broadband to a telecommunications service forced it into an internally contradictory position where it had to say out of one side of its mouth that the Open Internet rules would protect net neutrality but out of the other side that the Open Internet rules were not actually net neutrality, because that would put it too close to untouchable common carriage.[27]

In the *Verizon* verdict, the DC Circuit struck down the Open Internet Order's no-blocking and nondiscrimination rules. These two provisions, as discussed in Chapter 5, were the most important sections of the Order, meaning that the court tore out the heart of the FCC's Open Internet policy. The one provision that the court left standing, though, was the transparency rule.

Therefore, a broadband provider can now block or degrade any traffic it wants, as long as it makes it known somewhere. This does very little to protect users, however: because of the duopoly nature of nearly every local market for broadband, even if users are made aware of their broadband provider messing around with their traffic, they are left with very little choice and switching is made very difficult.[28] The DC Circuit found that the FCC has authority to make rules for broadband and even that it has the authority to make net neutrality rules for broadband— it just cannot do it without getting its definitions right. Although the *Verizon* case surprisingly proceeded in a very different way than the *Comcast* case, the practical effect ended up the same— the dissolution of enforceable net neutrality— and the underlying reason for it remained the same— the FCC's choice to define broadband as information and not telecommunications. The court made clear that net neutrality policy is imperative for the FCC, but that it just has to implement it under Title II.

The *Verizon* decision was a crushing blow for net neutrality, but the DC Circuit was right: as important as the Open Internet rules were, the FCC chose to build them on legal quicksand, and the court was just the one to point it out. The Open Internet being thrown out was yet another consequence of the FCC's fateful choice to classify broadband as an information service— a decision shaped by cable operators and blessed by the Supreme Court in the *Brand X* case— a case where the power of discourse in the policy sphere, and the power to dominate discourse there, could not be more plain. It was also a clear indication of the politics of policy: the FCC has refused to reclassify broadband as a telecommunications service, where it can base net neutrality policy on the sustainable basis of common carriage tradition because of the pressure it has received from the telecom industry and its allies in Washington. The FCC just has to use different keywords to define broadband— the policy really is that simple; it is the politics that

are hard. The third front on which Verizon argued against Open Internet policy, although not decisive in the case itself, was a particularly revealing site of discourse around

Free speech and property in Verizon

From the perspective of network operators, net neutrality is not protection of free speech but a violation of free speech. We can see this discourse playing out in the arguments made by Verizon in the case that struck down the Open Internet rules. In addition to its challenges based on the classification and regulatory authority issues discussed above, Verizon made two constitutional arguments: that the Open Internet rules were a violation of its First Amendment free speech rights and its Fifth Amendment property rights. While the DC Circuit did not decide the case on these points— avoiding what would be a very dangerous precedent to cement in communications policy— Verizon's constitutional arguments are representative of network operators' perspective on the issue and how much it relies for justification on a negative conception of free speech. Verizon's comments are revealing of an understanding of its role as a gatekeeper of public communications and such judicial arguments are an important site for the discursive construction of the issue with broader consequences to define net neutrality on its terms. Let us look now at Verizon's two constitutional arguments in turn.

In its challenge to the FCC's Open Internet rules, Verizon asserted First Amendment rights to control content on the internet. In its brief to the DC Circuit, Verizon wrote: "Broadband networks are the modern-day microphone by which their owners engage in First Amendment speech."[29] While this claim is outrageous on its face, it is actually a logical extension of the definition of broadband networks from the FCC: due to its classification as an information service, in its role as a broadband provider Verizon is considered a publisher and, as such, is

afforded editors' rights to control what information is made available on its network. From this view of its role as a 'publisher of the internet,' Verizon gets to decide what to carry and what to cut, what to feature and what to bury. "Although broadband providers have generally exercised their discretion to allow all content in an undifferentiated manner, they nonetheless possess discretion that these rules preclude them from exercising," Verizon wrote.[30] What net neutrality advocates understand as discrimination and prioritization, to Verizon is an exercise of its right to "editorial discretion."[31] A net neutrality requirement to assure users' ability to express themselves online equals, as a cadre of Right-libertarian think tanks argued in an *amicus* brief in support of Verizon, First-Amendment-violating "compelled speech."[32] To afford the kind of power that this represents to broadband providers is appallingly inconsistent with any reasonable commitment to democratic communications. This discourse is, however, entirely consistent with the definition of broadband services that currently underlies FCC regulation— that is the problem.

We can see in the implications of Verizon's First Amendment argument in this case just how dangerous network operators' power over FCC discourse can be: the company forwards an understanding of its own free speech as the right to censor citizens' free speech. Verizon and other network operators claim that their right to discriminate trumps users' rights to equal treatment. This is not only an explicit elevation of corporate free speech over that of citizens' free speech, but it comes from a corporation uniquely positioned to serve as a tremendously powerful private regulator of speech. Simply put, net neutrality is not a violation of network operators' free speech rights, it is a protection of users' free speech rights— the difference between these perspectives is a negative conception of the First Amendment or a positive one. To accept Verizon's argument against the Open Internet rules on these free speech grounds—

which, thankfully, the DC Circuit did not— would be to undermine the very basis of the internet as a basic infrastructure for democratic communications.

Free speech on the internet depends on network operators acting as conduits, not content. Common carriage and net neutrality assure that networks remain conduits— open channels for the transmission of user communications— but network operators want to use their networks for controlled delivery of content. This is the exact battle played out in the FCC's definition of broadband providers as telecommunications or information services. It comes down to the difference between transporting speech and speaking oneself— those who operate the networks are those that do the former but are attempting to pass off the former as the latter. Verizon compared its job as a broadband provider to a newspaper or television network, but it is no more the speaker of the content on the internet than is the post office of a letter it carries.[33] Except, that is, where Verizon is, in fact, accorded First Amendment rights: control over its own website and a guarantee to express itself equal to every other internet user. In the case of its own content, Verizon is afforded First Amendment protection— just not over all internet content. Verizon and other broadband providers do not, simply by virtue of operating the pipes that provide access to the internet, have the right to 'edit' the expression of online publics— that is, unless citizens allow them to take that right.[34]

Verizon argued that its technical ability to prioritize some expression and block others should be protected under the First Amendment, but such actions are not themselves expression. For an action to be sufficiently expressive to merit protection as free speech, it must have "[a]n intent to convey a particularized message" and a "likelihood [that is] great that the message would be understood by those who viewed it."[35] Verizon and other broadband providers carry a inconceivable quantity of expression every day, from a wide variety of perspectives, so to

suggest they could 'edit' this together to form any kind of coherent "particularized message" is ridiculous. There is no expression taking place in broadband providers' network management, because there is no editorial judgment involved in providing internet access and blocking internet traffic is not expressive conduct. That is the central argument forwarded by a team of legal scholars working with the Yale Information Society Project (including Ammori, Balkin, Nunziato, van Schewick, and others) in an *amicus* brief filed on the side of the FCC by the Center for Democracy & Technology (CDT).[36]

Verizon's comparison of itself to a publisher is simply an invalid analogy, because, as the CDT brief argued, there is no editorial judgment or particularized message in providing broadband access. The service broadband providers offer is a connection to the internet, not some 'publication' of internet content which they have created or curated. A subscription to internet access service is not paying a broadband provider to select any content for users— users do the selecting themselves. Part of the editorial role played by the newspaper publishers or television broadcasters to whom Verizon equates itself is predicated on space constraints that are not shared in the context of the internet. If internet access providers do not have the capacity to carry all the information they want to, it is their own doing as a result of an under-investment in facilities (Berman and Weitzner 1995). Further, network operators do not arrange for the production and publication of the content they carry nor do they have to host it themselves, but merely provide a connection to it. Courts consider carrying others' speech differently from organizing and selecting particular speech and what Verizon is doing is offering a means for others to speak.[37] This means that not only is there no particularized message or editorial discretion in this for net neutrality to interfere with, but it also does not amount to compelled speech because merely allowing speech to happen on its property does not imply endorsement.[38]

Beyond this, when broadband providers do block content they are not expressing any discernible message. As we saw in above in the case of Comcast's blocking of BitTorrent, there is no immediately apparent way for users to know why a site or service is not working, let alone who is responsible for it— a pretty difficult way to deliver a particular message (Bramble 2010). Further, decisions to prioritize or block content are in most cases merely business decisions— who is paying network operators more money or who is taking up too much capacity— that it would be quite a stretch to call free speech. To paraphrase Crawford, if corporations had their way and every business decision was protected as free speech, the First Amendment could make all government regulation unconstitutional.[39]

Broadband providers are not publishers of content, but providers of conduit, as the CDT brief makes clear. A 'conduit' is a pipeline through which users communicate— the operators of conduits play a passive role in merely passing along the messages of users, not an active role in the provision of the messages themselves. One way it is clear that broadband providers are conduits is that they say so themselves (except, of course, when they do not).[40] In the terms of service for its broadband internet access subscription, Verizon denies any responsibility or endorsement for any content it transmits.[41] This is consistent with the role of a passive conduit provider: as common carriers, conduits are legally protected from liability for the harm caused by what they carry. The prototypical example of this limitation of intermediary liability is that phone companies have no responsibility for bomb plots planned over the phone. The classic case for the digital age, though, is that internet access providers are not legally considered as contributing to copyright infringement by transmitting 'pirated' content. Indeed, Verizon makes clear its status as conduit in order to gain protection from liability in copyright infringement litigation.[42] However, conduits are common carriers not just when it comes to rights, but also

when it comes to responsibilities. As we saw in Chapter 3, this is a protection that common carriers enjoy in exchange for their duty to carry all messages equally. Broadband providers cannot have it both ways: they cannot claim to be conduit providers when it is in their interest and to be content providers when it is not (Frieden 2010). Verizon wants to claim control of content when it means wrapping itself in the First Amendment, but when it is not talking about net neutrality, all of a sudden, it says it has nothing to do with it.

The trouble with the above traced arguments from the CDT brief, though, is that they are based on what network operators do in the current moment and do little to address how they are likely to manage broadband networks in a near future without net neutrality. That is, arguing that as a broadband provider Verizon does not exercise editorial judgment and plays only a passive role in carrying the content of others takes for granted that those actions will remain definitive of broadband service provision. Although this is an understandable strategic move for the legal scholars in the immediate context of the *Verizon* case, it is a worrisome assumption to make in the bigger picture. Broadband providers already have the technical means and economic incentives to take much tighter control of internet traffic and are already, at the time of this writing, rolling out new technologies and business models to do just that. We saw this in Chapter 6 in what Comcast and AT&T have done with their broadband services in the aftermath of the Open Internet Order's failure. Such examples suggest that broadband providers' ultimate vision is a 'private internet,' where they select and package online content and services similar to the way cable television providers do. This would involve exactly the sort of editorial discretion that, as the CDT correctly argues, broadband providers do not employ today— but they are moving toward that for the future.

As ludicrous as it seems when describing what they do today, broadband providers clearly

reserve the right to be 'publishers' of the internet, including rights to 'edit' what information and communications they see fit. The DC Circuit did not address these grounds in its ruling for Verizon, but in staying silent on the constitutional arguments the court did leave the issue open. Verizon, for its part, made clear that it believes it has these publishers' rights and any choice to not put them into practice is from nothing more than their own benevolence. This is all right in its statement to the court cited above and worth repeating here: "Although broadband providers have generally exercised their discretion to allow all content in an undifferentiated manner, they nonetheless possess discretion that these rules preclude them from exercising."[43] They may not be there yet, in other words, but network operators are clearing the path in the direction they want to go— and the destination is a scary place for democratic communications.

Broadband providers believe they have a First Amendment right to control all the communications that flow on the internet, and with the absence of net neutrality rules following the *Verizon* case and the depth of influence from the negative discourse of free speech that has informed the current interpretations of the law, they might be right. Either way, network operators seem intent on moving in this direction of control and on shaping the policy discourse to follow in their wake. In light of this, the sort of in-the-trenches legal wrangling that the CDT brief represents is crucially important, but it is ultimately stuck playing on the existing uneven regulatory turf. Perhaps the more vital ground for intervention, then, is not what is protected under the law as it stands now, but rather expanding the bounds of what is considered relevant or possible within policy discourse. In addition to maintaining a commitment to the values of fairness and equality embedded within the principle of net neutrality, I argue, following scholars like Crawford, Cherry, and Sandvig, reclaiming the tradition of common carriage regulation and the larger affirmative conception of free speech is an integral part of this.

In its second constitutional argument in its case challenging the FCC, Verizon claimed Fifth Amendment rights to autonomy over the use of its private property. In its brief to the DC Circuit, Verizon wrote that the Open Internet rules amounted to "government compulsion to turn over [Verizon's] private property for use by others without compensation."[44] The cables and wires that make up broadband networks are owned by broadband providers like Verizon, which they argue gives them the right to deny others access to them. Verizon characterized the internet traffic that flows between users of the internet across the networks it owns as "physically invad[ing]" and "permanently occupy[ing]" their networks, echoing the legal parlance of what is called a 'regulatory taking.'[45] "Providers have invested billions in broadband infrastructure," Verizon noted, "on the understanding that they can manage access to network facilities and use those facilities to offer the products that their customers want."[46] From Verizon's perspective, net neutrality amounts to the government seizing its property and dictating what it does with it— not just interfering with its autonomy, but also its ability to gain a return on its investment. This would be a violation of the private property rights seen as the keystone right of any libertarian perspective, but especially valued from a corporate perspective that depends on control of private property as capital resources through which they generate profits.

Such an argument from Verizon is a clear demonstration of just how invested broadband providers are in a vision of private internets. There is a clear disconnect between the way Verizon talks about broadband networks— as private property, wholly under its control for profit maximization— and the role that internet infrastructures play culturally and politically— a public resource for all to use for democratic communications and connections. It is, however, entirely consistent with— and, indeed, a product of— the negative discourse of free speech that has taken hold of in the neoliberal era. It is more than a stretch to see the digital bits that make up

users' internet traffic as "occupying" broadband providers' networks— users are paying broadband providers to carry those bits, after all, and the government making clear the obligation to carry them on an equitable basis seems quite a conceptual distance from claiming 'eminent domain' over a piece of land. In response to this, Free Press suggested that if this is Verizon's understanding of the situation, it should advertise so to its subscribers, perhaps with a new slogan along the lines of, "Pay us a ton, and we might even let you use our service and 'invade our networks.' If we feel like it."[47]

As outrageous as it might be, this is entirely defensible if constrained only to the negative discourse of free speech. A definition of broadband as an information service places network operators within a market-based conceptualization of freedom of speech that depends on private property ownership as a baseline affordance. The transformation of citizen expression into undue invasion of property is just the logical conclusion of a line of thinking based on such a vision and the related disappearance of public space where free speech is actually afforded robust protection. When the free speech that citizens use the internet to express is at best commodified content for broadband providers to profit from and at worst an occupation of private property, we can see how far removed any sort of public values are from the perspective of the institutions that control basic communications infrastructure. This reifies public communications as any other type of information or content under the control of network operators. If broadband providers are defined as information services, and regulated as such, they are able to fortify a gatekeeper position over the online public sphere— 'editors' of the internet, with rights to control the flow of communication and information on the network. As with all of the developments discussed throughout this dissertation, this is a troubling situation for the future of the internet as an open infrastructure, but not one with no way forward.

Regardless of the rules put into policy and their intentions, without a definition of internet access as a basic infrastructure for communications among citizens— a telecommunications service— then there will be no meaningful net neutrality. A classification of broadband as an information service enables technological development in line with a more centralized closed network and gives up the solid footing for regulations to stand up to legal scrutiny, but also accepts a discourse based on a negative conception of free speech which erases all manner of public values and duties. The power that is channeled through discourse, though, is double-edged: if so much of the power that enables control over communications resides in cultural constructions, then they are ultimately open to cultural change. If we can succeed in changing the discourse, we can change the policies and, therefore, the structure of the public sphere. Just because broadband providers have the ability— with existing technological affordances and legal rights— to exercise control over democratic communications, does not mean they should be allowed to. They might have the power, but they do not have the consent. There is still ultimately a choice that has to be made, about what shape the next-generation internet ought to be— this is a political decision that should be made collectively, in line with public values, but that cannot happen without understanding of and participation in this decision-making process.

What is next for net neutrality?

The FCC's Open Internet policy was left in shambles after the *Verizon* decision but the Commission acted quickly to propose new rules to replace those that were struck down. At the time of this writing they remain in the proposal stage, but, even with as weak as the 2010 rules were, the 2014 version appears to be even weaker. As discussed above, the proposed 2014 Open Internet rules more directly allow for fast lanes through specialized services and remain based in

an information service framework that denies the common carriage basis in which meaningful net neutrality protections would have to be based. In many ways, though, prominent new fronts in the struggle over net neutrality, beyond the FCC and even beyond what has been traditionally seen as 'net neutrality,' have opened up to be just as important, or potentially more important, than Open Internet policy. I will close by mentioning some next steps for possible interventions in the discourse and policy of, as well as research on, net neutrality. In doing so, I will offer a brief set of recommendations for net neutrality policy drawn from the history traced in this dissertation.

To begin with, net neutrality as a media policy discourse has spread to other contexts with analogous situations of gatekeeper control over communications, and net neutrality research must follow suit. The most directly related context is that of openness in other areas of internet infrastructure, most notably in the backbone core of the network, where the implications of peering disputes and CDNs are increasingly impossible to see as separate from those of net neutrality. In addition to this, applying 'neutrality' or 'openness' policies to the workings of search engines, social networks, and app stores— especially when those apps and services are so dominated by corporations like Google, Facebook, and Apple— continues to be an important debate. Finally, intersections between net neutrality and other 'internet freedom' issues continue to develop, especially at the transnational level, where the online surveillance and censorship of the NSA, authoritarian states, corporations, and others intensify alongside related disputes at the UN, global governance forums, multilateral trade agreements, and elsewhere.

Further, how net neutrality principles, policies, and practices will (or will not) be applied to future broadband networks is far from settled, as the moment of this writing is the beginning of yet another moment of emergence in internet infrastructure around the world and the decisions

about how to regulate next-generation broadband networks will be just as pivotal as the policy battles recounted throughout this dissertation. Next-generation broadband projects, including fiber-to-the-home and nascent aerial wireless technologies, are currently in various stages of design, development, and deployment in different areas of the world. On the wired front, fiber networks are finally beginning to be deployed in more communities around the US— in a lag behind East Asia and Europe— largely as a result of Google Fiber and the way it has shaken up the duopoly broadband market. On the wireless front, buzz is beginning to build around fledgling aerial wireless technologies— solar-powered drones, satellites, and even hot-air balloons that would fly stationary at high altitudes and beam broadband signals to areas below, with particular focus on developing regions such as Sub-Saharan Africa— designed by startups that have been acquired by Google and Facebook. It would be easy to laud the unorthodox efforts of Google and Facebook to break into the broadband market in innovative ways, but their interest in expanding and improving internet access is different from the public interest in doing so, as they seek to create and further deepen relationships with users to whom they can monitor and serve ads. Rather than cheering on projects like Google Fiber to solve the problems of broadband in the US, as so many are, we ought to disabuse the assumption that trading a slow incumbent corporate broadband provider for a faster new corporate broadband provider will be sufficient. Indeed, the prospect of online content companies as broadband newcomers merely renews the whole host of surveillance, censorship, and even net neutrality concerns that traditional telecom corporations have brought on, especially as the record of discrimination by Google, Facebook, and their peers is long and especially troubling in light of a combined control over content and carriage. These issues surrounding the emergence of next-generation broadband infrastructure demand more critical research and analysis to consider the social and cultural implications of the design and

development of these technologies and the regulatory decisions that will be made about them. I see the next big questions to ask about these network infrastructures and their regulation as whether they will emerge to be open or closed, property or commons, public or private?

This brings us to a brief set of policy recommendations for the best way to ensure meaningful net neutrality for emergent network infrastructures. Drawing from the history of net neutrality discourse, these recommendations are based on what I see as two of the most significant contributions of academic advocates of net neutrality to the policy debate: Wu's notion of a "separations principle" (2010) and Crawford's plan for a utility model of broadband service (2009). Taking lessons from the history traced above and building on the work of Wu and Crawford, I forward the following five recommendations for net neutrality regulations in the US:

1) *Reclassification* of broadband internet access service from a Title I information service to a Title II telecommunications service, in order to base all of the following in a regulatory framework of common carriage;
2) A strong set of *transparency, no-blocking, and nondiscrimination rules*, including all forms of *wired and wireless internet access* and narrow exceptions for network management, cutting out loopholes for pay-to-play, paid prioritization, and specialized services;
3) Regulation for *structural separation* between network operators and content providers, meaning that Comcast's ownership of NBC-Universal and Google's move into broadband service would be disallowed;

4) Subsidies and policies to encourage *public ownership* of basic wired and wireless network infrastructure, such as 'dark' fiber-to-the-home networks and unlicensed wireless spectrum;
5) *Open access* regulation to assure nondiscriminatory wholesale leases to this basic public network infrastructure for competing independent retail ISPs.

The first two of these recommendations come from the core net neutrality debate covered through this dissertation, while the final three seek larger shifts in the structures of ownership in the broadband market. This is recognition that nondiscrimination and competition are each on their own necessary but insufficient conditions for more inclusive and participatory structures of internet access, a needed focus of future research in this area. In particular, the growth of municipal ownership of broadband represents an encouraging alternative to the traditional model of incumbent phone and cable companies and newcomers like Google and is— especially as it faces uphill battles in the many places where the telecom industry has pushed state and local legislation to discourage or even outlaw publicly-owned broadband infrastructure— is a vital new front in these battles to which critical research and analysis ought to be applied.

Whether net neutrality regulations like those suggested above are able to gain traction in the policy sphere depends on the discourse that operates there. The first step is shifting how internet access is seen and thought of in the policy sphere, to be more in line with the values of fairness and equality articulated by net neutrality. This can happen through interventions in both scholarship and advocacy, toward both policymakers and the public, to support net neutrality principles and policies.

As we have seen from the history laid out above, how media technologies emerge follow not from some inherent nature but from political choices— the kinds of political choices made

through debates around issues like net neutrality. No matter how open emergent media might be, democratization of communications is far from inevitable. At the same time, though, it is also not inevitable that emergent media will be come to be controlled by the powerful few. The case of net neutrality— unfolding still as I write— does not represent yet another case of corporate power dominating the emergence of another media system, but rather a struggle that is yet to be won.

Notes

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[18] *Verizon v. FCC* ("*Verizon*"), 740 F3d 623 (DC Circuit, 2014), http://www.cadc.uscourts.gov/internet/opinions.nsf/3AF8B4D938CDEEA685257C6000532062/$file/11-1355-1474943.pdf: 20.

[19] *Verizon*: 33.

[20] Ibid.

[21] Ibid.: 17-44.

[22] Ibid.: 16-17, 36-44.

[23] Verizon Brief: 14-21.

[24] 47 USC Sec. 3(h).

[25] Ibid.

[26] See: Wu. "Network Neutrality FAQ." Tim Wu. Web. 12 July 2014. http://www.timwu.org/network_neutrality.html.

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[30] Ibid.: 43.

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