KILL SWITCHES, FORUM DOCTRINE, AND THE FIRST AMENDMENT'S DIGITAL FUTURE[•]

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Abstract

Governments play a growing role in providing access to digital speech spaces. This development has important consequences for free expression. Communication's migration from physical public spaces to virtual ones has increased the State's capacity for ex ante interference with speech, from targeted blocking of users, websites, and applications on its communications networks to shutting off access to those networks altogether. Contrary to the conclusions of most Speech Clause scholars, the First Amendment's public forum doctrine is ill equipped to solve these problems, in part because the doctrine under-protects speech that is not expressed in shared physical space. Accordingly, this Article proposes a different path for applying the First Amendment to Stateprovided speech spaces: When a government transmits user speech over its networks, it should give that speech common carrier-type treatment, and both use-based and user-based discrimination over those networks should be presumptively barred. In addition, established doctrines such as prior restraint, incitement, and content neutrality can resolve any

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questions concerning digital speech in virtual public space.

There is also the problem of contract law. Like any network service provider, municipalities place terms of use-based obligations on users as a condition of access to their networks, including waiver of government liability for disconnection or other denials of access. These waivers implicate the unconstitutional conditions doctrine. If the State must, as a First Amendment matter, carry the traffic of any willing user on its network subject to certain narrow content and viewpoint-neutral exceptions, it cannot then ask prospective users to waive that right as a precondition to carriage. By demanding waiver of suit for any disconnection as a prerequisite to speak, these terms of service provisions condition receipt of a government benefit upon acceptance of a prior restraint.

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*The Internet is uncontrollable. And if the Internet is uncontrollable, freedom will win. It's as simple as that.*¹ — Ai Weiwei

I thought there was no way to put the genie back in the bottle, but now it seems in certain areas the genie has been put back in the bottle.² — Sergey Brin

¹ Ai Weiwei, *China's Censorship Can Never Defeat the Internet*, GUARDIAN (Apr. 15, 2002), http://www.guardian.co.uk/commentisfree/libertycentral/2012/apr/16/china-censorship-internet-freedom.

² Ian Katz, *Web Freedom Faces Greatest Threat Ever, Warns Google's Sergey Brin*, GUARDIAN (Apr. 15, 2012, 13:07 EDT), http://www.guardian.co.uk/technology/2012/apr/15/web-freedom-threat-google-brin (relaying Brin's thoughts on issues of Internet freedom as revealed in an interview with *The Guardian*) (internal quotation marks omitted).

INTRODUCTION

We live in a communications golden age.³ With technology's aid, we speak to multiple listeners at the speed of digital packet delivery. Our current mix of networks, hardware, software, and interconnection ensures that a speaker's audience is no longer limited to the size of the park, debate hall, or even the National Mall. Legal and communications scholars are analyzing the ways in which ubiquitous Internet access, combined with social media–related platforms, enervate political communication and collective action.⁴ However, the question going unasked is whether the interconnection that information and communications technology ("ICT") enables has come at a cost to free speech.

Digital expression, while open in theory, is in fact a *mediated* and *monitored* experience. It is *mediated* in the sense that a number of third parties to the communication are necessary for its delivery and receipt. Internet Service Providers ("ISPs") like Comcast and AT&T; application companies like Facebook, Twitter, Flickr, and Apple; and search and email service providers like Google all retain the authority to make decisions affecting the content and reach of digital speech.⁵ Additionally, the State's role as a mediator of digital speech is growing.⁶ Through services such as municipal WiFi networks and other

³ See, e.g., Am. Civil Liberties Union v. Reno, 929 F. Supp. 824, 883 (E.D. Pa. 1996) ("[The Internet is] the most participatory form of mass speech yet developed."), *aff*"d, 521 U.S. 844 (1997); RUSSELL L. WEAVER, FROM GUTENBERG TO THE INTERNET: FREE SPEECH, ADVANCING TECHNOLOGY, AND THE IMPLICATIONS FOR DEMOCRACY 52 (2013) ("[The Internet has caused] a free speech revolution that has affected not only the United States, but the entire world. In the broad sweep of history, freedom of speech has never been as possible for ordinary people as it is today.").

⁴ This work focuses on social media–driven protests of authoritarian regimes. *See, e.g.*, Anupam Chander, *Googling Freedom*, 99 CALIF. L. REV. 1, 4 (2011); Donald L. Doernberg, *Sovereignty in the Age of Twitter*, 55 VILL. L. REV. 833, 856 (2010); Marvin Ammori, *The Year in "First Amendment Architecture*," 2012 STAN. TECH. L. REV. 6, 6 (2012); Christian Christensen, *Twitter Revolutions? Addressing Social Media and Dissent*, 14 COMM. REV. 155, 157 (2011); LIBERATION TECHNOLOGY: SOCIAL MEDIA AND THE STRUGGLE FOR DEMOCRACY (Larry Diamond & Marc F. Plattner eds., 2012). The mainstream press has adopted this narrative as well. *See, e.g.*, Michael Moran, *From Short Waves to Flash Mobs*, SLATE (Apr. 10, 2012, 7:42 AM), http://www.slate.com/articles/news_and_politics/foreigners/2012/04/revolutionary_technology_fa cebook_twitter_and_wikileaks_pose_a_challenge_to_governments_everywhere_.html.

⁵ These intermediaries often assert their own speech rights in justifying those decisions. *See, e.g.,* Comcast Cablevision of Broward Co., Inc. v. Broward Cnty., 124 F. Supp. 2d 685, 693–94 (S.D. Fla. 2000). For an argument that constitutional protection for private-party Internet intermediation rests comfortably within long-standing Supreme Court First Amendment jurisprudence protecting editorial discretion, see Christopher Yoo, *Free Speech and the Myth of the Internet as an Unintermediated Experience*, 78 GEO. WASH. L. REV. 697 (2010). For an intermediary's assertion of those rights against government open access mandates, see Timothy B. Lee, *Verizon: Net Neutrality Violates Our Free Speech Rights*, ARSTECHNICA (July 3, 2012, 2:15 PM), http://arstechnica.com/tech-policy/2012/07/verizon-net-neutrality-violates-our-free-speech-rights/.

⁶ As used here, the term "State" refers to the gamut of governments and their instrumentalities, from sovereign states down to municipalities.

Internet access in public places, or ICT-enabled modes for citizengovernment communications,⁷ governments provide access to digital speech spaces in ways analogous to, but also distinct from, their provision of conventional physical speech spaces.

Relatedly, digital expression is *monitored*, in that it is easier than ever for State actors to surveil communications in the space between speaker and audience. By now there is no doubt that the Internet "enhance[s] the power," as well as the efficiency, of the "surveillance apparatus."8 Over the last few years, for example, law enforcement in the United States and the United Kingdom have been testing methods for automated social media collection and analysis. In early 2012, the FBI's Strategic Information and Operations Center published a Request for Information seeking a "social media alert, mapping, and analysis application solution" that would "instantly search and monitor key words and strings" in Twitter, Facebook, and other "publicly available social networking sites [and] forums," and "rapidly assemble critical open source information and intelligence that will allow SIOC to quickly vet, identify, and geo-locate breaking events, incidents, and emerging threats."9 And the recent controversy over the National Security Agency's PRISM program, which analyzes users' communication data collected by ICT-providing companies, has brought the inherent monitorability of online speech into sharp focus.¹⁰

⁷ See, e.g., JOHN O. MCGINNIS, ACCELERATING DEMOCRACY: TRANSFORMING GOVERNANCE THROUGH TECHNOLOGY 33 (2013) ("[O]ur new information technologies can help citizens do a better job of mapping our far more complex policy landscape by reducing information costs."); GAVIN NEWSOM, CITIZENVILLE: HOW TO TAKE THE TOWN SQUARE DIGITAL AND REINVENT GOVERNMENT (2012); Lyrissa Lidsky, *Public Forum 2.0*, 91 B.U. L. REV. 1975 (2011).

⁸ EVGENY MOROZOV, THE NET DELUSION: THE DARK SIDE OF INTERNET FREEDOM 83 (2011). As Morozov notes, the KGB had to drill bug holes, monitor workplaces, and listen to every conversation to collect dissidents' incriminating speech and associations. *Id.* at 150. The modern-day secret police, however, can simply run keyword searches of intercepted emails from the comfort of their own offices. *See id.* at 150–51. Indeed, private ISPs in Russia must now provide this functionality to the government as a matter of Russian law. *See* REBECCA MACKINNON, CONSENT OF THE NETWORKED: THE WORLDWIDE STRUGGLE FOR INTERNET FREEDOM 68–69 (2012).

⁹ Federal Business Opportunities, Department of Justice, Social Media Application, FEDBIZOPPS.GOV (Jan. 19, 2012), https://www.fbo.gov/index?s=opportunity&mode=form&id= c65777356334dab8685984fa74bfd636&tab=core&_cview=1; *see also Facebook Crimes Probed by Humberside Police*, HULL DAILY MAIL (Aug. 24, 2011), http://www.thisishullandeastriding .co.uk/Facebook-crimes-probed-Humberside-Police/story-13191231-detail/story.html.

¹⁰ See, e.g., James Ball, *NSA's Prism Surveillance Program: How It Works and What It Can Do*, GUARDIAN (June 8, 2013, 1:56 PM), http://www.guardian.co.uk/world/2013/jun/08/nsa-prismserver-collection-facebook-google. The service providers themselves have all denied that the government has the capacity or permission to directly access their servers for user data. *See, e.g.,* Cecelia Kang, *Google Details How It Hands Over Data to Federal Officials*, WASH. POST (June 12, 2013), http://www.washingtonpost.com/business/technology/google-details-how-it-hands-over-data-to-federal-officials/2013/06/12/94671d26-d377-11e2-b05f-

³ea3f0e7bb5a_story.html?wprss=rss_homepage. *See also* Eric Lichtblau, *Cell Carriers Called on More in Surveillance*, N.Y. TIMES (July 8, 2012), http://www.nytimes.com/2012/07/09/us/cell-carriers-see-uptick-in-requests-to-aid-surveillance.html?_r=1&hp (noting cellphone carriers

Despite the mediated and monitored nature of digital speech, two points of conflict between online speakers and the State remain underexplored: (1) ex ante interferences with networked speech antecedent to the intended speech act, via either government exercise of control over all or part of the network or selected denials of network access to certain users; and (2) ex post criminal punishment of social media usage for organizing and enabling nominally illegal multi-party conduct, in the place of or in addition to punishment of the illegal conduct itself. The first development is more troubling than the second. To be sure, actual or potential *ex ante* interference by *private* parties is a topic of robust academic and public policy debate, as is the government's role in preventing such exercises in the context of net neutrality.¹¹ But these arguments often presume cyberspace-enabled communications as taking place within an entirely privatized speech space¹²—a presumption this Article is unwilling to concede. "Virtual public spaces," those speech platforms made accessible via governmentprovided Internet connections, will host an ever-larger share of our online speech. Even if these State-provided services appear indistinguishable from those offered by private entities on the user's end, the Constitution is nevertheless implicated when a speech space is public, whether the space is physical or virtual. In addition, government

reported responding to 1.3 million demands last year for subscriber information from law enforcement agencies seeking text messages, caller locations, and other information). For an early compendium of State efforts to enlist private parties as "proxy censors" and surveillants of online communication, see Seth F. Kreimer, Censorship by Proxy: The First Amendment, Internet Intermediaries, and the Problem of the Weakest Link, 155 U. PA. L. REV. 11, 16-27 (2006). ¹¹ See, e.g., Daniel A. Lyons, Net Neutrality and Nondiscrimination Norms in Telecommunications, 54 ARIZ. L. REV. 1029, 1033-34 (2012); Babette E.L. Boliek, FCC Regulation v. Antitrust: How Net Neutrality is Defining the Boundaries, 52 B.C. L. REV. 1627 (2011); Charles L. Jackson, Wireless Efficiency Versus Net Neutrality, 63 FED. COMM. L.J. 445 (2011); Daniel A. Lyons, Virtual Takings: The Coming Fifth Amendment Challenge to Net Neutrality Regulation, 86 NOTRE DAME L. REV. 65 (2011); Alexander Reicher, Redefining Net Neutrality After Comcast v. FCC, 26 BERKLEY TECH. L.J. 733 (2011); Jonathan Zittrain, Net Neutrality as Diplomacy, 29 YALE L. & POL'Y REV. 18 (2010); Dennis L. Wiseman & Robert B. Kulick, Price Discrimination, Two-Sided Markets, and Net Neutrality Regulation, 13 TUL. J. TECH. & INTELL. PROP. 81 (2010); Catherine J.K. Sandoval, Disclosure, Deception, and Deep-Packet Inspection: The Role of the Federal Trade Commission's Deceptive Conduct Prohibitions in the Net Neutrality Debate, 78 FORDHAM L. REV. 641 (2009); Sasha Leonhardt, The Future of "Fair and Balanced": The Fairness Doctrine, Net Neutrality, and the Internet, 2009 DUKE. L. & TECH. REV. 8 (2009); Peter Linzer, From the Gutenberg Bible to Net Neutrality-How Technology Makes Law and Why English Majors Need to Understand It, 39 MCGEORGE L. REV. 1 (2008). Indeed, the aforementioned articles are just those with "net neutrality" in their titles; there are literally hundreds more exploring the topic. Even more are undoubtedly forthcoming in light of the U.S. Court of Appeals for the D.C. Circuit's vacatur on statutory grounds of the Federal Communication Commission's proposed net neutrality rules for private ISPs. See Verizon v. FCC, No. 11-1355 (D.C. Cir. Jan. 14, 2014).

¹² See, e.g., DAWN C. NUNZIATO, VIRTUAL FREEDOM: NET NEUTRALITY AND FREE SPEECH IN THE INTERNET AGE 43 (2009) ("The balance between publicly and privately owned spaces, however, does not carry over to cyberspace, which . . . is composed almost entirely of privately owned spaces and privately owned conduits for expression ").

exertion of authority over online speakers can occur at several points across the mediated communications space, as well as on the user end, because, as Julie Cohen notes, "real-space sovereigns can exert physical power over real-space users," and "cyberspace users are situated in real space."¹³ *Ex ante* proscriptions of digital speech can occur via both network-based and user access-based interferences. Consequently, the ability of speakers in real space to communicate through cyberspace has fundamentally changed our relationship with the State as well as with each other.

In light of these changes to the social and legal relationships between speech and technology, the question posed by this Article is whether current First Amendment doctrines are ill-equipped to address interferences with digital speech, in part because that speech takes place in both physical and nonphysical space. Because cyberspace is both an "extension and evolution of everyday spatial practice,"14 the inability of free speech doctrine to fully reckon with the non-space-based aspects of ICT-enabled speech leads to digital speech's underprotection, especially relative to the conventional shared-space speech on which free speech doctrine was built. Accordingly, when a State offers a space for digital speech, this Article argues that, contrary to the conclusions of most other legal scholars with respect to both virtual public spaces and the Internet more generally,¹⁵ public forum doctrine—which considers a public's traditional use of that space and the government's motive in establishing it when determining the reach of speech's protection in that space—should not be implicated at all. Rather, the State should be held to the same common carrier-type carriage obligations that it imposes on private entities offering public utilities and other public interest-related services. Imposing, and, in the case of violations, enforcing, these nondiscriminatory duties will ensure that the unique characteristics of digital speech will not lead to its under-protection in the face of government interference.

A veritable coalition of willing scholars has attempted to jigger the public forum doctrine to bring the Internet within its scope.¹⁶ Those

¹³ Julie E. Cohen, *Cyberspace as/and Space*, 107 COLUM. L. REV. 210, 220–21 (2007); *see also id.* at 218 ("Cyberspace is not, and never could be, the kingdom of the mind; minds are attached to bodies, and bodies exist in the space of the world.").

¹⁴ Id. at 210.

¹⁵ See infra note 16.

¹⁶ See, e.g., Michael J. Fitzpatrick, *The Constitutionality of Restricting the Use of Social Media: Flash Mob Protests Warrant First Amendment Protections*, 43 SETON HALL L. REV. 799 (2013); Barbara H. Smith, *The First Amendment Right to Receive Online Information in Public Libraries*, 18 COMM. L. & POL'Y 63, 63 (2013); Lidsky, *supra* note 7; Ammori, *supra* note 4; Bill Sherman, *Your Mayor, Your "Friend": Public Officials, Social Networking, and the Unmapped New Public Square*, 31 PACE L. REV. 95 (2011); Erika R. George, *Tweeting to Topple Tyranny, Social Media and Corporate Social Responsibility: A Reply to Anupam Chander*, 2 CALIF. L. REV. CIRCUIT 23 (2011); Marc Jonathan Blitz, *Stanley in Cyberspace: Why the Privacy Protection of the First*

efforts have failed, however, and that result is good for digital speech. The public forum doctrine is unable to take proper account of the communication spaces of this century and the next. Moreover, despite those scholars' efforts, existing precedent makes it unlikely that courts will apply forum doctrine to an online speech space, whether the space is State-provided or not. It is thus time to abandon efforts to apply the doctrine to digital speech and to explore alternative measures to ensure that this speech is protected. Public forum doctrine becomes more irrelevant and counterproductive to the modern First Amendment with each passing chat, blog post, text, and tweet.

Part I of this Article considers whether ICT-enabled speech is materially different from conventional speech, and if so, how. Part II describes the advent of State-provided communications spaces through ICT, and argues that such spaces will host an increasingly large amount of our public discourse. Part III considers the public forum doctrine and its inapplicability to digital speech, emphasizing, in particular, how illequipped the doctrine is to address issues raised by the State's *ex ante* interferences with ICT-enabled communication. Part IV proposes that the speech-affirming values underlying common carriage, as well as established First Amendment doctrines such as prior restraint, the distinction between content-based and content-neutral regulation, and incitement, are able to resolve the freedom of speech-related challenges raised by ICT. Part IV then sets out a specific nondiscriminatory framework for government management of online speech spaces,

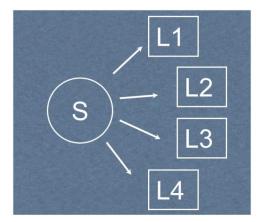
Amendment Should be More Like That of the Fourth, 62 HASTINGS L.J. 357, 397-98 (2010); Olivier Sylvain, Internet Governance and Democratic Legitimacy, 62 FED. COMM. L.J. 205, 253-54 (2010); David S. Ardia, Government Speech and Online Forums: First Amendment Limitations on Moderating Public Discourse on Government Websites, 2010 BYU L, REV. 1981. 1998-99 (2010); Ned Snow, Copytraps, 84 IND. L.J. 285, 316-17 (2009); Philip M. Napoli & Sheea T. Sybblis, Access to Audiences as a First Amendment Right: Its Relevance and Implications for Electronic Media Policy, 12 VA. J.L. & TECH. 1, 20-30, 42 (2007); Anthony E. Varona, Out of Thin Air: Using First Amendment Public Forum Analysis to Redeem American Broadcasting Regulation, 39 U. MICH. J.L. REFORM 149, 191-92 (2006); Dan Hunter, Cyberspace as Place and the Tragedy of the Digital Anticommons, 91 CALIF. L. REV. 439 (2003); David J. Goldstone, A Funny Thing Happened on the Way to the Cyber Forum: Public vs. Private in Cyberspace Speech, 69 U. COLO. L. REV. 1, 6 (1998); Noah D. Zatz, Sidewalks in Cyberspace: Making Space for Public Forums in the Electronic Environment, 12 HARV. J.L. & TECH. 149 (1998); Steven G. Gey, Reopening the Public Forum-From Sidewalks to Cyberspace, 58 OHIO ST. L.J. 1535 (1998); David J. Goldstone, The Public Forum Doctrine in the Age of the Information Superhighway (Where Are The Public Forums on the Information Superhighway?), 46 HASTINGS L.J. 335 (1995); Henry H. Perritt, Jr., Access to the National Information Infrastructure, 30 WAKE FOREST L. REV. 51 (1995); Donald E. Lively, The Information Superhighway: A First Amendment Roadmap, 35 B.C. L. REV. 1067, 1095–98 (1994); Edward J. Naughton, Note, Is Cyberspace a Public Forum? Computer Bulletin Boards, Free Speech, and State Action, 81 GEO. L.J. 409, 428–35 (1992); Michael L. Taviss, Editorial Comment, Dueling Forums: The Public Forum Doctrine's Failure to Protect the Electronic Forum, 60 U. CIN. L. REV. 757, 781-88 (1992). Indeed, as noted above, some of this work seeks to make the Internet a public forum in order to proscribe interference with user speech by private companies providing Internet access.

considers whether the framework should also apply to networks operated by private partners offering Internet service on behalf of States, and reviews State networks' terms of service, particularly waivers of suit for disconnection as an access precondition, in light of the unconstitutional conditions doctrine. The Article concludes by attempting to reframe our thinking about the digital First Amendment.

I. CAPACITY FOR INTERFERENCE WITH DIGITAL SPEECH

A. Two Models of Communication Flows

The figure below is a simple model of communication among citizens in public space as traditionally understood by our historical conceptions of free speech and associational rights. The S is the primary speaker in the model; the Ls represent listeners in the speaker's audience; and the arrows represent the communication.



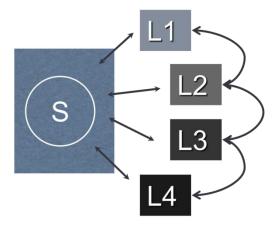
First Amendment law, as applied via the public forum doctrine, operates under a presumption that speakers and listeners share the same space. Geography is thus a limitation on communication. In addition to a spatial limitation, a temporal limitation exists as well; speakers and listeners must generally share the same space at the same time in order for listeners to receive the speaker's message.

When the government proscribes or otherwise interferes with speech under this model, forum doctrine looks primarily at the space the speakers and listeners share—represented above by the model's large exterior box. Questions, such as who owns the space, or whether it has traditionally been used or set aside for speech by its owner, become determinative. As discussed in detail below,¹⁷ once a court deems a space to be public, application of the doctrine's "time immemorial" and

¹⁷ See infra Part III.A–B.

"designated for speech" factors decide the initial First Amendment questions. If the shared space is a traditional one or has been designated for speech by the State, the government cannot shut that space down to speech *ex ante* for content-based reasons without satisfying strict scrutiny, and it cannot do so for content-neutral reasons without establishing that the shutdown is necessary to serve an important government interest and is narrowly tailored to achieve that compelling interest.¹⁸ On the other hand, if the speech space is not a traditional or designated public forum, the government can regulate as long as it does so in a reasonable fashion, and in a way that is not based on the viewpoint of the speaker.¹⁹ And even if the State has designated the space as a public forum, the government is under no obligation to keep it open for future speech-related uses.²⁰

The model below, by contrast, models citizen-to-citizen communication through ICT.



Speakers and listeners do not share physical space. Rather, speech is sent and received from different locations. Listeners need not share space as among themselves, let alone with the speaker. And speech remains "received," in the sense a text, email, status update, or tweet is received, for as long as the listener retains it. It is also easily redistributed among other listeners without degrading the initial communicative act.

The second model shows how ICT both affirms and challenges many of the theoretical conceptions that undergird our conceptions of

¹⁸ Carey v. Brown, 447 U.S. 455, 461 (1980); Perry Educ. Ass'n v. Perry Local Educators' Ass'n, 460 U.S. 37, 45 (1983); Wells v. City & Cnty. of Denver, 257 F.3d 1132, 1145 (2001).

¹⁹ See Gey, supra note 16, at 1547–48 ("[Where a forum is non-public,] the government, like a private property owner, can close such forums to expression altogether, so long as it does not do so selectively according to the viewpoint of the speaker.").

²⁰ Perry, 460 U.S. at 46; see also DiLoreto v. Downey Unified Sch. Dist. Bd. of Educ., 196 F.3d 958, 970 (9th Cir. 1999), cert. denied, 529 U.S. 1067 (2000).

freedom of speech. ICT "lowers the cost of transmission, distribution, appropriation, and alteration of information."²¹ This is so because "[digital] speech is participatory and interactive. People don't merely watch (or listen to) the Internet as if it were television or radio. Rather, they surf through it, they program on it, they publish to it, they write comments and continually add things to it."²² Lines between speaker and listener, speaking and listening, and acting and reacting all become blurred. The removal of spatial limitations on the receipt of speech, as well as the capability for so many more listeners to receive and redistribute speech nearly instantaneously, promotes the formation and development of a participatory democratic culture.²³

Despite these gains in speech utility, however, the second model also demonstrates the nature of intermediation in the ICT space. Every point in the act of communication-the speaking, the speech transmission, the receipt, the subsequent redistribution of the speech—is facilitated by a third party, whether it be an app or other software developer in the case of speaking and receipt, or one or more network operators in the case of the "speech arrows" above.²⁴ Indeed, the first part of this equation-freeing a speech act from the precondition of shared space—was initially achieved through printing. There, as now, when speech moved into new media not subject to the same spatial and temporal limits and methods of distribution became more efficient, the opportunity for, and efficacy of, censorship of that speech increased drastically as well.²⁵ But with ICT, the irrelevance of shared space and time is not limited to the newspaperman, the broadcaster, the book author, or even the Revolution-era pamphleteer. Internet access, mobile phones, and social media platforms have eroded the economic barriers that previously limited the one-to-many publishing model to a select few.

Thus, the take-away from these models is that through ICT, we have overcome temporal and spatial limitations on communication, but we need constant intermediation in order to do so. It also means, as the

²¹ Jack M. Balkin, Digital Speech and Democratic Culture: A Theory of Freedom of Expression for the Information Society, 79 N.Y.U. L. REV. 1, 8 (2004).

²² Id. at 34.

²³ *See id.* at 4 ("Speech occurs between people or groups of people; individual speech acts are part of a larger, continuous circulation. People participate in culture by interacting with others and influencing and affecting them through communication.").

²⁴ A "piece" of speech communicated over ICT originates on the speaker's server, is actually likely to travel across a *series* of networks, and is reassembled on the receiver's network for delivery. *See* Lyons, *supra* note 11, at 1033–34. For simplicity's sake, when this Article discusses State-owned, -operated, or -provided ICT networks, it assumes that the speech or receipt of speech at issue have originated on such a network.

²⁶ See, e.g., M. ETHAN KATSH, THE ELECTRONIC MEDIA AND THE TRANSFORMATION OF LAW 136–43, 156, 159 (1989).

next Section argues, that by moving our communications from physical spaces to digital ones, we have exponentially increased the capacity for interference with speech.

B. Ex Ante Interference with ICT-enabled Speech: The 21st Century Prior Restraint

The intermediation of ICT has manifested itself in a range of speech interferences by governments around the world. *Ex ante* controls have manifested themselves most nefariously in States' exercises of control over communications networks through the use of "kill switches": shutoffs of all or parts of citizens' Internet service. In the international context, State uses of the kill switch in response to government protests in Syria, Egypt, Libya, India, and Pakistan have been well-documented.²⁶ But there have been less-discussed domestic examples, such as Bay Area Rapid Transit's 2011 shutdown of cell service on its BART trains and tunnels in anticipation of a protest in the train system, as well as the Port Authority of New York and New Jersey's similar cut-off of service immediately after the London subway bombings in July 2005.²⁷ Preemptively targeting social media use to deter future unlawful conduct is on the rise both domestically and worldwide.²⁸

²⁶ See, e.g., Jennifer Valentino-DeVries, Paul Sonne & Nour Malas, U.S. Firm Acknowledges Syria Uses Its Gear to Block Web, WALL ST. J. (Oct. 29, 2011), http://online.wsj.com/article/ SB10001424052970203687504577001911398596328.html; Jon Tullet, The Desperation of a Failed State, ITWEB (Nov. 30, 2012), http://www.itweb.co.za/index.php?option=com _content&view=article&id=60469:The-desperation-of-a-failed-state&catid=147; Hae-in-Lim, Lisa Ferguson, Ellery Biddle & Sarah Myers, Netizen Report: India Suspends Mobile Broadband in Kashmir, GLOBALVOICES (July 23, 2013, 22:13 GMT), http://advocacy.globalvoicesonline .org/2013/07/24/netizen-report-india-suspends-mobile-broadband-in-kashmir/; Salman Latif, Pakistan: Government Suspends Mobile Services in Major Cities on Eid, GLOBALVOICES (Aug. 20, 2012, 2:13 GMT), http://globalvoicesonline.org/2012/08/20/pakistan-government-suspends mobile-service-in-major-cities-on-eid/. Foreign governments have likewise shut down cell service for far less threatening reasons. See, e.g., Sofia Lotto Persio, Uzbekistan Cuts Cell, Internet Services During National Exam, NETPROPHET (Aug. 1, 2012), http://netprophet.tol.org /2012/08/01/uzbekistan-cuts-cell-internet-services-during-national-exam/.

²⁷ Parker Higgins, *BART's Cell Phone Shutdown, One Year Later*, ELECTRONIC FRONTIER FOUND. (Aug. 13, 2012), https://www.eff.org/deeplinks/2012/08/barts-cell-phone-shutdown-one-year-later; Patrick McGeehan, *Cellphones Chime Again in Tunnels Under Hudson*, N.Y. TIMES (July 20, 2005), http://www.nytimes.com/2005/07/20/nyregion/20cell.html (discussing Port Authority of New York and New Jersey's cut-off of cellphone service in the Holland and Lincoln Tunnels on July 7, 2005, immediately following the London subway bombings).

²⁸ Government officials in countries such as the United Kingdom, Pakistan, India, and Turkey have either threatened to ban access to social media applications or websites, or have already done so. *See, e.g.*, 531 PARL. DEB., H.C. (6th ser.) (2011) 1051 (U.K.), *available at* http:// www.publications.parliament.uk/pa/cm201011/cmhansrd/chan192.pdf (Statement of Prime Minister David Cameron to the House of Commons providing that the Prime Minister's administration was "working with the Police, the intelligence services and industry to look at whether it would be right to stop people communicating via these websites and services when we know they are plotting violence, disorder and criminality."); Simon Roughneen, *India Blocks Facebook, Twitter, Mass Texts in Response to Unrest*, MEDIASHIFT (Aug. 28, 2012),

Ex post controls have arisen in the context of flash mobs, more accurately described as "smart mobs" when organized via social media. Though the first smart mobs were inspired by performance art "happenings," social media was soon deployed to organize *ad hoc* protests, group threats, street fights, and other activity affecting public order.²⁹ For example, in a sub-type of smart mob known as the "flash rob," Twitter or Facebook users make plans to overwhelm a retail store with their numbers, stealing as many products as they can in a short period of time by outnumbering surprised sales staff.³⁰ In response to these developments, U.S. municipalities have debated the use of smart mob ordinances, which are designed to punish individuals using Twitter and other social media tools to plan collective lawless action in public places.³¹

Though the use of *ex post* punishments for social media use is problematic for free speech, the most notable aspect of this taxonomy for First Amendment purposes is how ICT has multiplied the ways in which governments can delay or stop speech before it reaches its intended audience. *Ex post* punishments for speech have, for better or for worse, always been with us, and good arguments can be made that the medium the speech takes should play no role in analyzing those interferences.³² But the intermediation of digital speech has exponentially increased the number of ways in which the State can

http://www.pbs.org/mediashift/2012/08/india-blocks-facebook-twitter-mass-texts-in-response-tounrest241; Kevin Collier, *Turkey Considers Temporary Social Media Ban*, MASHABLE (Sept. 4, 2012, 4:40 PM), http://www.mashable.com/2012/09/04/turkey-social-media-ban/.

²⁹ See Ian Urbina, Mobs Are Born as Word Grows by Text Message, N.Y. TIMES (Mar. 24, 2010), http://www.nytimes.com/2010/03/25/us/25mobs.html; Robert Faturechi & Andrew Blankstein, Flash Mobs, Riots Prompt Debate About Social Media Crackdown, L.A. TIMES (Aug. 16, 2011, 7:52 AM), http://latimesblogs.latimes.com/lanow/2011/08/flash-mobs-riots-prompt-debate-aboutsocial-media-crackdown.html.

³⁰ See, e.g., NAT'L RETAIL FED'N, MULTIPLE OFFENDER CRIMES: PREPARING FOR AND UNDERSTANDING THE IMPACT OF THEIR TACTICS (Aug. 2011), *available at* http://www.nrf.com/modules.php?name=News&op=viewlive&sp_id=1167.

³¹ See, e.g., Tina Kaufmann, Mayor Frank Jackson Vetoes Proposed Unruly Flash Mob Ordinance, NEWSNET5.COM (Aug. 4, 2011), http://www.newsnet5.com/dpp/news/local_news/ cleveland_metro/mayor-frank-jackson-vetoes-proposed-unruly-flash-mob-ordinance; see also Bill Increasing Penalty for Flash Mobs Passes [Illinois] State Senate, 89 WLS (Apr. 25, 2013, 8:10 AM), http://www.wlsam.com/common/page.php?pt=Bill+increasing+penalty+for+flash+mobs+ passes+state+Senate&id=33873.

³² For example, see Adam Thierer, *Technopanics, Threat Inflation, and the Danger of an Information Technology Precautionary Principle*, 14 MINN. J.L. SCI. & TECH. 309, 311–12 (2013), for a discussion of government arguments that the rise of social media calls for new technology-specific laws (illustrating the whiff of moral panic plaguing some members of society). Thierer provides:

While cyberspace has its fair share of troubles and troublemakers, there is no evidence that the Internet is leading to greater problems for society than previous technologies did. That has not stopped some from suggesting there are reasons to be particularly fearful of the Internet and new digital technologies. There are various individual and institutional factors at work that perpetuate fear-based reasoning and tactics.

silence speech preemptively, from the blocking of individual websites, social media software or content, particular users' access to content or functionality, to using a kill switch to shut down access to all or part of a communications network. Even surveillance, the *ex post* interference most enervated by ICT-enabled speech, has ex ante effects; qualitative sociological research shows that knowledge or fear of surveillance forces organizations to direct energy from the pursuit of their goals to defensive maintenance of their communications.³³ And States can use ex post surveillance of speech to identify opportunities for future ex ante "just-in-time" State interferences³⁴ with digital speech undertaken in anticipation of public protests or other assemblies. Moreover, these ex ante interferences range from targeted service or application blocking of individual users to strategically employed service-wide shutdowns. Such surveillance can be covert, as in the NSA PRISM program example, or via "open source intelligence," that is, targeted analyses of publicly available social media or other Internet usage information. For an example of the latter, the "web intelligence" company BrightPlanet is currently marketing BlueJay, its "Law Enforcement Twitter Crime Scanner," to law enforcement agencies.35 BlueJay permits law enforcement to search for tweets by keyword, originating geolocation or user.³⁶ In the international context, the U.S. State Department has also explored using just-in-time blocking to prevent Somalian militants from using Twitter.37

³³ See Amory Starr et al., The Impacts of State Surveillance on Political Assembly and Association: A Socio-Legal Analysis, 31 QUALITATIVE SOC. 251, 255 (2008); see also Gulf Unrest: Laws on Way to Curb Misuse of Social Media, GULF DAILY NEWS (June 13, 2012), http://www.gulf-daily-news.com/source/XXXV/085/pdf/page03.pdf. Surveillance-related problems are compounded by the application of the Third Party Doctrine to online communications. See, e.g., Monu Bedi, Facebook and Interpersonal Privacy: Why the Third Party Doctrine Should Not Apply, 54 B.C. L. REV. 1, 36–38 (2013).

³⁴ "Just-in-time" blocking is a government network attack that is intended to "take down' strategically important sources of information or services at key moments in time … " Ronald Deibert & Rafal Rohozinski, *Beyond Denial: Introducing Next-Generation Information Access Controls, in* ACCESS CONTROLLED: THE SHAPING OF POWER, RIGHTS, AND RULE IN CYBERSPACE 3, 7–10 (Ronald Deibert et al eds., 2010); *see also* Ronald Deibert & Rafal Rohozinski, *Control and Subversion in Russian Cyberspace, in* ACCESS CONTROLLED: THE SHAPING OF POWER, RIGHTS, AND RULE IN CYBERSPACE 15, 25–26 (2010).

³⁵ See Nate Anderson, *How the Cops Watch Your Tweets in Real-Time*, ARSTECHNICA (Sept. 15, 2013, 3:00 PM), http://arstechnica.com/tech-policy/2013/09/how-the-cops-watch-your-tweets-in-real-time; *see also Law Enforcement Twitter Scanner*, BLUEJAY, http://www.brightplanet.com /bluejay/ (last visited Oct. 16, 2013).

³⁶ Id.

³⁷ Jeffrey Gettleman, U.S. Considers Combating Somali Militants' Twitter Use, N.Y. TIMES (Dec. 19, 2011), http://www.nytimes.com/2011/12/20/world/africa/us-considers-combating-shabab-militants-twitter-use.html. Twitter suspended the group's account following the State Department's efforts, thereby suspending the account for the second time this year. See Nicholas Kulish, Twitter Suspends Somali Militants' Account, Cutting a Link to the Wider World, N.Y. TIMES (Sept. 6, 2013), http://www.nytimes.com/2013/09/07/world/africa/twitter-account-of-somali-insurgents-is-shut-down.html.

These are not simply technophobia-driven concerns. In December 2012, the network-monitoring company Renesys used Border Gateway Protocols to publish a map, titled "Risk of Internet Disconnection," showing sixty-one countries in which governments could shut down Internet service countrywide.³⁸ Technical experts believe that a countrywide shutdown in the United States would be impossible, due to the high number of ISPs bringing traffic into the country, as well as the complexity of our private networks.³⁹ Public networks, however, are by definition easier to control, as fewer parties do the controlling. And although a national public WiFi network in the United States may not be feasible,⁴⁰ the State's role at the local level in providing ICT service is growing exponentially. Efforts to provide true municipal WiFi networks have developed in fits and starts, but hundreds of cities now provide some form of online access, either on their own or through partnerships with private entities.⁴¹ Every one of these networks presents a setting for potential *ex ante* State interference with speech.

Moreover, even though some Internet networks are too large and complicated for the State to shut off completely, governments have also shown themselves to be amenable to customized censorship to preclude speech *ex ante*. Before the Arab Spring, some commentators believed that digital technology was so central to economic development that governments would hesitate to censor the web or shut down Internet access, since doing so could potentially harm international perception and thus investment, in addition to logistical challenges.⁴² But the

 ³⁸ Robert McMillan, *The 61 Countries a Mad Despot Could Instantly Unplug From the Internet*,
 WIRED (Dec. 3, 2012, 6:30 AM), http://www.wired.com/wiredenterprise/2012/12/internet_plug/.
 ³⁹ Jim Cowie, *Could It Happen In Your Country*?, RENESYS BLOG (Nov. 30, 2012, 11:32 AM),
 http://www.renesys.com/blog/2012/11/could-it-happen-in-your-countr.shtml.

⁴⁰ See infra Part II. On February 3, 2013 the Washington Post ran a front-page article titled Tech, Telecom Giants Take Sides as FCC Proposes Large Public WiFi Networks, which stated that "[t]he federal government wants to create super WiFi networks across the nation;" the article provoked a near-outcry in the science and tech communities. See Michael Moyer, Sorry, The Government Is Not Creating Free Nationwide Wi-Fi Networks, SCI. AM. BLOG (Feb. 5, 2013), http://blogs.scientificamerican.com/observations/2013/02/05/sorry-the-government-is-not-

creating-free-nationwide-wi-fi-networks/ (citing Cecilia Kang, *Tech, Telecom Giants Take Sides* as FCC Proposes Large Public WiFi Networks, WASH. POST (Feb. 3, 2013), http://www.washingtonpost.com/business/technology/tech-telecom-giants-take-sides-as-fcc-proposes-large-public-wifi-networks/2013/02/03/eb27d3e0-698b-11e2-ada3-

d86a4806d5ee_story.html?hpid=z1); see also Jon Brodkin, Wi-Fi "As Free As Air"—The Totally False Story That Refuses to Die, ARSTECHNICA (Feb. 7, 2013, 7:10 PM), http://arstechnica.com/tech-policy/2013/02/wi-fi-as-free-as-air-the-totally-false-story-that-refuses-to-die/.

⁴¹ See Timothy Zick, *Clouds, Cameras, and Computers: The First Amendment and Networked Public Places*, 59 FLA. L. REV. 1, 11–13 (2007) ("Whatever the merits of the economic and rights arguments, efforts to stall or prevent the spread of Muni WiFi appear to be going nowhere."); Rob Pegoraro, *Going to Town with WiFi*, WASH. POST (Apr. 19, 2007), http://www. washingtonpost.com/wp-dyn/content/article/2007/04/18/AR2007041802511.html (discussing public/private municipal WiFi networks).

⁴² MOROZOV, supra note 8, at 93 (quoting Brad Stone & Noam Cohen, Tweeting Their Way to

assumption underlying this "Dictator's Dilemma" has proved to be false. The State has become willing as well as able to exercise *ex ante* control over digital communications, for example, by using technology to precisely target offending users or websites.⁴³ Selective service denials on the basis of online behavior or expressed interests prove that digital speech facilitates State interference; and since it takes place behind our screens, this interference will be harder to detect than the closing of a park, the denial of a parade permit, or an arrest in the public square.

One might argue that even with the rise of government speech networks in our cities, interference with digital speech by foreign governments through technical means are far from our First Amendment-informed experience here in the United States. Perhaps not. Indeed, as previously noted,⁴⁴ in response to planned protest activity within its train system, BART decided to shut down its cellphone network repeaters, which under normal circumstances permit riders to access voice and data information in the train system. In early July 2011, BART police shot and killed a homeless man who had allegedly threatened to stab them.⁴⁵ A few days later, BART authorities learned that protesters were planning to organize a protest of the shooting, that it was to take place in the train system on August eleventh, and that it would be planned and carried out via mobile communications.⁴⁶ Consequently, BART officials decided to shut down

⁴⁴ See supra note 27 and accompanying text.

Freedom?, N.Y. TIMES UPFRONT (Oct. 5, 2009), http://teacher.scholastic.com/scholasticnews/ indepth/upfront/features/index.asp?article=f100509_Tech); *see also* YOCHAI BENKLER, THE WEALTH OF NETWORKS: HOW SOCIAL PRODUCTION TRANSFORMS MARKETS AND FREEDOM 266 (2006) ("Most countries are not, however, willing to forgo the benefits of connectivity to maintain their control.").

⁴³ Such actions have not only been taken by despotic countries in the Middle East and Africa. *See, e.g.*, Renai LeMay, *Interpol Filter Scope Creep: ASIC Ordering Unilateral Website Blocks*, DELIMITER (May 15, 2013, 20:40), http://delimiter.com.au/2013/05/15/interpol-filter-scope-creep-asic-ordering-unilateral-website-blocks. Indeed, the most comprehensive study of State interference with connections to digital networks found that of the 566 instances of interference involving 101 countries between 1995 and 2010, 51% occurred in authoritarian regimes, whereas 39% occurred in democracies (and the other 9% occurred in either emerging democracies or fragile states). Philip N. Howard, Sheetal D. Agarwal & Muzammil M. Hussain, *When Do States Disconnect Their Digital Networks? Regime Responses to the Political Uses of Social Media*, 14 COMM. REV. 216, 222 (2011). It is true, however, that authoritarian regimes shut down access to the Internet significantly more often than democracie countries do. *See id.* at 224 (noting authoritarian regimes shut down access to the Internet not only significantly more often than fragile states and emerging democracies but also twice as often as democracies).

⁴⁵ See Zusha Elinson, BART Officer Killed Man 25 Seconds After Arriving on Scene, BAYCITIZEN (July 21, 2011 7:10 PM), https://www.baycitizen.org/news/bart-police-shooting/bart-officer-killed-man-25-seconds-after/.

⁴⁶ Michael Cabanatuan, *BART Admits Halting Cell Service to Stop Protests*, SFGATE (Aug. 12, 2011, 2:49 PM), http://www.sfgate.com/default/article/BART-admits-halting-cell-service-to-stop-protests-2335114.php. One of these groups, "No Justice No BART," had a contentious history with BART and had organized previous protests that disrupted train service, including one that occurred just days after the July 2011 shooting. *See* Jacob G. Fleming, *The Case for a Modern*

BART-owned cell phone signal repeaters in an attempt to disrupt the protesters' organization efforts.⁴⁷ Service was shut down from 4:00 to 7:00 p.m. on the eleventh, and as a result, the protest failed to take place.⁴⁸ More recently, in April 2013, cellphone service in Boston was temporarily unavailable following two explosions at the finish line of the Boston Marathon. Initially, relying on a law enforcement source, the Associated Press reported that the National Communications System, a subdivision of the Department of Homeland Security, had shut down the service, ostensibly in order to prevent remote detonations of additional explosives.⁴⁹ Later stories corrected that initial report, determining that the cause of the service outage was overload due to excess use rather than government intervention.⁵⁰ But the incident raises the question of whether the First Amendment would have been violated if such a shutdown *had* occurred. It is a question that deserves consideration.

II. THE RISE OF THE STATE-PROVIDED SPEECH NETWORK

Government provision of, and thus control over, online speech spaces is on the rise. Cities and counties are developing free WiFi networks at a rapid pace, both on their own and in collaboration with private operators.⁵¹ The emergence of these services, combined with the

⁴⁸ Cabanatuan, *supra* note 46.

Public Forum: How the Bay Area Rapid Transit System's Wireless Shutdown Strangled Free Speech Rights, 51 WASHBURN L.J. 631, 633–34 (2012); New BART Action Planned for This Thursday, NO JUSTICE NO BART BLOG, http://nojusticenobart.blogspot.com/ (last visited Oct. 16, 2013).

⁴⁷ Letter from Bob Franklin, BART Bd. of Dirs., and Sherwood Wakeman, BART Interim Gen. Manager, to BART Customers (Aug. 20, 2011) [hereinafter BART Letter to the Public], *available at* http://www.bart.gov/news/articles/2011/news20110820.aspx; *see also* Isa-Lee Wolf, *BART Conflict Reveals Power of the Cell Tower: Cell Phones the First Amendment's New Best Friend*, YAHOO! NEWS (Aug. 16, 2011, 12:50 PM), http://news.yahoo.com/bart-conflict-reveals-powercell-tower-165000944.html. In response to the BART incident, California passed a law requiring a government entity to seek a court order before interrupting wireless communications. See CAL. PUB. UTIL. CODE § 7908.

⁴⁹ Eileen Sullivan, *Cellphone Use Heavy, But Still Operating in Boston*, ASSOCIATED PRESS (Apr. 15, 2013, 6:03 PM), http://bigstory.ap.org/article/official-cellphone-service-shut-down-boston. The AP's initial report, sent via Twitter, stated: "Cellphone service shut down in Boston to prevent remote detonations of explosives, official says[.]" *See* Associated Press, TWITTER (April 15, 2013, 1:59 PM) https://twitter.com/AP/status/323903338762608641. As the BART and Port Authority examples show, local authorities retain the power and authority to shut down access to networks without invoking the NCS protocol. *See supra* notes 27, 45.

⁵⁰ See, e.g., Timothy B. Lee, *Gov't Didn't Shut Down Cell Networks in Boston—But it Could Have*, ARSTECHNICA (Apr. 16, 2013, 6:00 PM), http://arstechnica.com/tech-policy/2013/04/govt-didnt-shut-down-cell-networks-in-boston-but-it-could-have/?utm_source=feedly; Tom Spring, *Did Boston Police Jam Cell Reception After Bombings?*, TECHNEWS DAILY (Apr. 17, 2013, 5:15 PM), http://www.technewsdaily.com/17789-boston-bombing-cellphone-jamming.html.

⁵¹ See, e.g., Joanna Stern, New York City Pay Phone Booths Now Free WiFi Hotspots, ABC NEWS (July 11, 2012), http://abcnews.go.com/Technology/york-city-pay-phone-booths-now-free-wifi/story?id=16756016#.Ud7X-DvR2So; Josh Constine, Google Pays \$600K to Give Free Wi-Fi to 31 San Francisco Parks, TECHCRUNCH (July 24, 2013), http://techcrunch.com/2013/07/24/ free-wifi-san-francisco-google; Sharon E. Gillett, Municipal Wireless Broadband: Hype or

movement of so much of our speech online, is causing what Timothy Zick calls a "fundamental makeover of public places," one that "will alter the nature, character, and democratic functions of public places and public expression."⁵² It is dangerous to assume, however, that the alteration is necessarily for the better. As Zick argues, because digital communication makes "speech regulation [] less transparent to all of us," it "threaten[s] to render public places less capable of serving their traditional democratic functions."⁵³

A. Public Internet Access: The Muni Broadband Comeback

In the late 1990s and early 2000s, municipality-provided broadband promised to reach across and into every city and town in the United States, offering citizens ubiquitous free or low-cost Internet service at high connection speeds. Supermajorities of voters in smaller towns across the United States approved bonds for financing of public broadband networks in their communities that would be operated and administered like any other utility.⁵⁴ As John Blevins notes, "literally hundreds of cities" during that time "announced plans for various types of municipal broadband projects-most of them wireless networks."55 A primary selling point of these efforts was that they would assist in closing the "digital divides" in these communities by providing highspeed Internet access to citizens who may not have been able to afford it.⁵⁶ Local businesses would benefit as well, as the networks would help them reach potential customers and allow for flexible employee schedules.⁵⁷ Public wireless networks would also provide networked and efficient government service delivery for both citizens and civil servants, connecting everything from parking meters to police cars.⁵⁸

Just a few years later, however, municipal WiFi's momentum had

Harbinger?, 79 S. CAL. L. REV. 561, 565-81 (2006).

⁵² Zick, *supra* note 41, at 5.

⁵³ Id.

⁵⁴ The majorities in these votes were often overwhelming:

[[]A]n Alta, Iowa referendum realized an eighty-eight percent voter approval rate. In Muscatine, Iowa, ninety-four percent of the voters sanctioned the bond issue. Similarly, in Spencer, Iowa, the incumbent cable company out-spent proponents 130-to-1, and voters nonetheless approved the project by a ninety-one percent majority. In Coldwater, Michigan, voters first rejected a proposal to issue general obligation bonds to finance a broadband network, but subsequently approved an issue of revenue bonds.

Steven C. Carlson, A Historical, Economic, and Legal Analysis of Municipal Ownership of the Information Highway, 25 RUTGERS COMPUTER & TECH. L.J. 1, 7–8 (1999) (internal citations omitted).

⁵⁵ John Blevins, *Death of the Revolution: The Legal War on Competitive Broadband Technologies*, 12 YALE J.L. & TECH. 85, 104 (2009).

⁵⁶ *Id.* at 105 (citing Alexis Grant, *Houston WiFi to Benefit Lower-Income Residents: City's WiFi Plan: Access for All*, HOUS. CHRON. (Feb. 25, 2007), http://www.chron.com/business/technology/article/Houston-WiFi-to-benefit-lower-income-residents-1536453.php).

 ⁵⁷ Eric M. Fraser, *The Failure of Public WiFi*, 14 J. TECH. L. & POL'Y 161, 163 (2009).
 ⁵⁸ *Id.*

all but stalled. After 2004, when the U.S. Supreme Court held in *Nixon v. Missouri Municipal League* that the Federal Telecommunications Act of 1996 did not preempt states from passing laws that barred municipalities from adopting their own telecommunications services,⁵⁹ incumbent telephone and cable companies stepped up their lobbying of state legislatures, and nearly twenty states passed such laws.⁶⁰ Private operators also came to decide that there was no viable business case for supporting municipal WiFi networks. Philadelphia's plans for a citywide public network, the highest profile municipal WiFi project of its kind in the country, collapsed after its joint venture partner, EarthLink, abandoned its public-private partnership business model and terminated its WiFi service in the city in 2008.⁶¹ Similar plans in San Francisco, Chicago, and Houston also flopped.⁶²

However, the past few years have seen a significant uptick in government-provided broadband Internet services in municipalities both large and small. Municipal broadband's comeback can be attributed to the explosion of demand for mobile wireless access through smartphones—ownership of which increased from sixteen percent of Americans in 2009 to fifty-six percent in 2012⁶³—as well as the

^{59 541} U.S. 125, 127 (2004).

⁶⁰ See, e.g., SUSAN CRAWFORD, CAPTIVE AUDIENCE: THE TELECOM INDUSTRY AND MONOPOLY POWER IN THE NEW GILDED AGE, 255–57 (2013) (detailing Time Warner's successful efforts in the North Carolina legislature to pass a law banning municipal broadband service in that state, and noting that "18 other states have laws that make it extremely difficult or impossible for cities to provide this service to their citizens"); Jesse Drucker, *Wireless Warrior*, WALL ST. J., Feb. 13, 2006, at R.8, *available at* http://online.wsj.com/article/SB113943275592368690.html ("[L]egislatures in at least 14 states and Congress proposed legislation to restrict municipal wireless efforts."); François Bar & Namkee Park, *Municipal Wi-Fi Networks: The Goals, Practices, and Policy Implications of the U.S. Case*, 61 COMM. & STRATEGIES 107, 107 (2006) (detailing the growing number of municipal WiFi networks in the U.S and abroad), *noted in* Michael A. Janson & Christopher S. Yoo, *The Wires Go To War: The U.S. Experiment with Government Ownership of the Telephone System During World War I*, 91 TEX. L. REV. 983, 987 & n.18 (2013). By one account, at least thirty-five states have considered such legislation. *See* Blevins, *supra* note 55, at 110 n.127 (citing FED. COMMC'NS COMM'N, BRINGING BROADBAND TO RURAL AMERICA: REPORT ON A RURAL BROADBAND STRATEGY 53 n.308 (2009)).

⁶¹ John Cox, *Philly's Wi-Fi Net To Be Shut Down*, NETWORK WORLD (May 13, 2008, 3:16 PM), http://www.networkworld.com/news/2008/051308-philly-wi-fi-net-shut-down.html. In addition, service offered during the networks' brief operational period was spotty and slow. *See* Deborah Yao, *Earthlink's Wi-Fi Network in Philly Hits Snags*, NBCNEWS.COM (Nov. 16, 2007, 8:00 PM), http://www.nbcnews.com/id/21840429/ns/technology_and_science-wireless/t/earthlinks-wi-fi-

network-philly-hits-snags/#.UaztbaLR18E. The city of Philadelphia eventually acquired the network, but its plans for its use were primarily for public safety and thus much more modest. *See* Geoff Duncan, *Philadelphia Buys Earthlink's Failed Municipal Wi-Fi Network*, DIGITAL TRENDS (Dec. 18, 2009), http://www.digitaltrends.com/computing/philadelphia-buys-earthlinks-failed-municipal-wi-fi-network/.

⁶² Michael Hatamoto, *Philadelphia Wi-Fi Project Now in Jeopardy, EarthLink May Back Out*, BETANEWS (Nov. 19, 2007), http://betanews.com/2007/11/19/philadelphia-wi-fi-project-now-in-jeopardy-earthlink-may-back-out.

⁶³ WHITE HOUSE OFFICE OF SCIENCE AND TECH. POL'Y & NAT'L ECON. COUNCIL, FOUR YEARS OF BROADBAND GROWTH 7 (June 2013), http://www.whitehouse.gov/sites/default/files/broadband_report_final.pdf (citing Aaron Baar, *Tablets, Smartphones Driving CE Sales*, MKTG.

increased focus municipalities placed on aggregating smaller service areas within their city limits.⁶⁴ As of 2011, around 130 municipalities offered city-wide WiFi;⁶⁵ eighty-four cities had large outdoor WiFi hotspots, mostly in parks and downtown areas;⁶⁶ and another fifty-six had citywide or near-citywide coverage, but used it for government applications such as public safety.⁶⁷ Currently cities are exploring ways to add more WiFi and cellphone access for users of public transportation.⁶⁸

These newer networks will also provide Internet service at everincreasing speeds. Through the nonprofit organization Gig.U, a group of research universities, many of them public, have committed to building or facilitating high-speed broadband networks in their communities.⁶⁹ In addition, cities such as Cedar Falls, Iowa have begun rolling out fiberto-the-home-based Internet connectivity to their citizens. San Leandro,

⁶⁷ Vos, *Updated List, supra* note 66.

DAILY (July 24, 2012, 6:14 PM), http://www.mediapost.com/publications/article/179415/tablets-smartphones-driving-ce-sales.html).

⁶⁴ See, e.g., Cambridge Public Internet (CPI) WiFi Access Points, CAMBRIDGEMA.GOV, http:// www.cambridgema.gov/itd/CPI.aspx (last visited Oct. 17, 2013); *About*, KENNESAWWIFI.NET, http://www.kennesawwifi.net/about (last visited Oct. 17, 2013). For a map showing WiFi access points in the City of Newton, North Carolina, see City of Newton, MERAKI, http://p13.meraki.com/network/CityofNewton (last visited Oct. 17, 2013). For an example of the City of Chicago's approach, see Greg Hinz, *City Unveils Plan For Free Wi-Fi, Wider Super-Fast Internet*, CRAIN'S CHICAGO BUSINESS (Sept. 24, 2012, 3:30 PM), http://www. chicagobusiness.com/article/20120924/BLOGS02/120929936/city-unveils-plan-for-free-wi-fi-

wider-super-fast-internet; City of Chicago Request for Information (RFI) for Broadband Infrastructure Expansion, *available at* http://www.cityofchicago.org/content/dam/city/ depts/dps/ContractAdministration/Specs/2012/Spec111304.pdf (detailing intended coverage areas throughout Chicago); Press Release, Chicago Mayor Emanuel, Mayor Emanuel Announces Chicago Broadband Challenge (Sept. 24, 2012), http://www.cityofchicago.org/content/dam/ city/depts/mayor/Press%20Releases/2012/September/

^{9.24.12}broadbandchallenge.pdf. The largest of these networks was recently announced by New York City; the free Harlem WiFi network will cover 95 city blocks. *See* Brian Heater, *NYC Mayor Unveils Plans for Massive Free Public WiFi Network in Harlem*, ENGADGET (Dec. 10, 2013), www.engadget.com/2013/12/10/bloomfi/.

⁶⁵ See Olivier Sylvain, *Broadband Localism*, 73 OHIO ST. L.J. 795, 805 (2012) (citing Christopher Mitchell, PUBLICLY OWNED BROADBAND NETWORKS: AVERTING THE LOOMING BROADBAND MONOPOLY 1 (Mar. 23, 2011)).

⁶⁶ Esme Vos, Updated List of US Cities and Counties with Large Scale WiFi Networks, MUNIWIRELESS.COM (June 7, 2010), http://www.muniwireless.com/2010/06/07/updated-list-ofcities-and-counties-with-wifi/ [hereinafter Vos, Updated List]; Esme Vos, AT&T Launches Free WiFi in New York City Parks, MUNIWIRELESS.COM (June 9, 2011), http://www. muniwireless.com/2011/06/09/att-launches-free-wifi-in-new-york-city-parks/.

⁶⁸ See, e.g., Matt Flegenheimer, *Wi-Fi and Cellphone Service on Subway Trains? M.T.A. Leader Says It May Happen*, N.Y. TIMES (Sept. 17, 2013), http://www.nytimes.com/2013/09/18/ nyregion/mta-plans-wi-fi-and-phone-service-on-subway-

trains.html?partner=rss&emc=rss&smid=tw-nytimes&_r=0. This would complement the service M.T.A. has already made available in many of its underground Manhattan stations through its agreement with Transit Wireless, the company behind this project. *See* Matt Flegenheimer, *Underground Cellphone Service Expands, But Some Call for Quiet*, N.Y. TIMES (Apr. 25, 2013), http://www.nytimes.com/2013/04/26/nyregion/30-more-new-york-subway-stations-get-cellphone-service.html.

⁶⁹ See FAQs, GIG.U, www.gig-u.org/faqs (last visited Oct. 5, 2013).

California offers a similar network to local businesses; and Lawrence, Kansas and Longmont, Colorado are also following suit.⁷⁰ These networks offer connection speeds that are both more reliable and one hundred times faster than standard in-home cable or DSL services.⁷¹ In sum, based on current trends, we can expect these networks to cover more and more of our public spaces.

B. Federal Commandeering of ICT Services

The federal government has also become increasingly involved in funding and providing local broadband service, largely due to the lack of incentives for private operators to finance network build-outs and improve capacity in rural areas.⁷² Historically, most federal funding to

⁷⁰ See, e.g., Verne Kopytoff, *Google's Not the Only One With Super-High-Speed Internet Plans*, FORTUNE (June 18, 2013, 11:34 AM), http://tech.fortune.cnn.com/2013/06/18/googles-not-theonly-one-with-super-high-speed-internet-plans/?section=money_technology; Scott Rochat, *Longmont City Council OKs Proceeding With Fiber Network*, TIMES-CALL (May 14, 2013, 11:20 PM), http://www.timescall.com/news/longmont-local-news/ci_23245319/longmont-city-counciloks-proceeding-fiber-network?IADID=Search-www.timescall.com-www.timescall.com; Blevins, *supra* note 54, at 105 & nn.93–94.

⁷¹ See Mike Elgan, Google Fiber Divides Users Into 'The Fast' and 'The Furious,' COMPUTERWORLD (Apr. 27, 2013, 6:42 AM), http://www.computerworld.com/s/article/9238713/ Google_Fiber_divides_users_into_the_fast_and_the_furious_?pageNumber=1 (detailing connection and download speeds of Google-provided fiber networks in Kansas City, Austin and Provo).

⁷² FCC, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN 136 (2010). Connecting rural areas to the Internet has been a priority of the past three presidential administrations. *See, e.g.*, Press Release, The White House, The Clinton-Gore Administration: A National Call to Action to Close the Digital Divide (Apr. 4, 2000), *available at* http://clinton4.nara .gov/WH/New/html/20000404.html; Press Release, President George W. Bush, Bush's Remarks on High Tech Improving Economy, Health Care, and Education (June 24, 2004), *available at* http://georgewbush-whitehouse.archives.gov/news/releases/2004/06/20040624-7.html

⁽addressing the U.S. Department of Commerce and discussing his agenda for America's innovation, part of which includes ensuring "broadband technology is available in every corner of America by the year 2007."). For example, the 2009 stimulus package granted over seven billion dollars to state and local governments and private providers for broadband projects in rural areas, as well as schools, libraries, public safety offices, and other municipal and community buildings. The legislation delegated authority over administration of the funds to the Rural Utilities Services program in the Department of Agriculture and the Commerce Department's National Telecommunications and Information Administration. See Sylvain, supra note 65, at 798, 809-11. In this legislation, Congress also included a mandate to the FCC to develop a National Broadband Plan that "seek[s] to ensure that all people of the United States have access to broadband capability;" the FCC delivered the Plan to Congress in March 2010. American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 (2009) (codified at 47 U.S.C. § 1305 (2009)). In 2011, pursuant to the goals set out in the Plan, the FCC approved a process for transferring monies from its Universal Service Fund, traditionally designated for the expansion of telephone service into underserved areas, to a new Connect America Fund dedicated to expanding broadband deployment in those same areas. See Grant Gross, FCC Votes to End Telephone Subsidies, Shift to Broadband, PCWORLD (Oct. 27, 2011, 12:00 PM), http://www.pcworld.com/article/242713/fcc votes to end telephone subsidies shift

to_broadband.html. That same year, the NTIA and the FCC launched the "National Broadband Map," which details areas where broadband is available and identifies areas for future growth. *See* Anne Neville, The National Broadband Map, BROADBAND.GOV (Feb. 18, 2011), http://blog.broadband.gov/?entryId=1278226.

remedy this build-out discrimination has supported extending voicebased communication services to unserved and underserved areas, but the flow of dollars is moving inexorably toward broadband subsidies.⁷³ Advocates of fiber-to-the-home for all Americans have called for additional direct public investment of nearly one hundred billion dollars in federal funding, much of which would go directly to municipally owned and operated high-speed Internet networks.⁷⁴

Finally, and most disconcertingly, broadening executive and legislative branch interpretations of federal emergency authority are increasing the number of opportunities for State interference with communications networks, regardless of whether those networks are publicly or privately owned. For example, a recent Executive Order granted the Department of Homeland Security the power to commandeer "commercial ... and privately owned communications resources" as part of its obligation to "satisfy priority communication requirements" during emergencies.⁷⁵ According to the White House, the Order extended federal authority that already existed over networks owned and operated by inferior governmental entities.⁷⁶ In addition, a complementary Presidential Policy Directive from October 2012 asserted that federal government departments and agencies have the authority to engage in actions including "the manipulation, disruption, denial, degradation, or destruction of computers, information or communications systems, networks, [or] physical or virtual infrastructure," in order to "defend[] or protect[] against," inter alia, activities that "seek to compromise or impair the confidentiality, integrity, or availability of computers, information or communications systems."77 And an early version of a cybersecurity bill introduced in

⁷³ See Neville, supra note 72.

⁷⁴ CRAWFORD, *supra* note 60, at 261–67.

⁷⁵ Exec. Order No. 13,618, 77 Fed. Reg. 40779 (July 6, 2012), *available at* http://www.gpo.gov/fdsys/pkg/FR-2012-07-11/pdf/2012-17022.pdf. The President's claimed basis for authority to do so was Section 706 of the Communications Act of 1934, as amended, 47 U.S.C. § 606, which grants the President the authority to "[close] [] any facility or station for wire communication." *See* Exec. Order No. 13,618 Sec. 2.3, 77 Fed. Reg. at 40779; 47 U.S.C. § 606. ⁷⁶ See Exec. Order No. 13,618, 77 Fed. Reg. 40779. *See also* S. Smithson, *DHS Emergency Power Extended, Including Control of Private Telecom Systems*, WASH. TIMES (July 12, 2012),

http://www.washingtontimes.com/news/2012/jul/12/dhs-emergency-power-extended-includingcontrol-of-/.

⁷⁷ Presidential Policy Directive/PPD-20, pp. 2–3 (Oct. 16, 2012), *available at* http://www.theguardian.com/world/interactive/2013/jun/07/obama-cyber-directive-full-text

⁽memorandum with the subject line "U.S. Cyber Operations Policy," marked as "top secret"); *see also* Glenn Greenwald & Ewen MacAskill, *Obama Orders US to Draw up Overseas Target List for Cyber-Attacks*, GUARDIAN (June 7, 2013), http://www.theguardian.com/world/2013 /jun/07/obama-china-targets-cyber-overseas. Disclosure of the federal government's protocols for shutting down private communications is currently the subject of litigation. See, e.g., Russell Brandom, *Court Orders Homeland Security to Release "Kill Switch" Protocol*, VERGE (Nov. 15, 2013), http://www.theverge.com/2013/11/15/5107676/court-orders-homeland-security-to-release-kill-switch-protocol.

the U.S. Senate in 2010 would have given the Executive Branch the authority to "issue a declaration of a national cyber emergency to [protect] covered critical infrastructure."⁷⁸

Accordingly, the State's role in providing or otherwise playing an outsized role in Internet-based communications networks is growing. Of course, government subsidy alone is insufficient to transform private owners and operators of Internet networks into state actors.⁷⁹ But many of the interventions described above are much deeper than that; indeed, in the case of many of the municipal wireless networks in existence or proposed, the government is often not simply the owner of the service, but the service provider as well. And even in those networks provided to the public via partnerships between local governments and private Internet service companies, users' access is often circumscribed by State-based terms and conditions. What is the First Amendment's role in these developments? The Article turns now to that question.

III. PUBLIC FORUM DOCTRINE AND CYBERSPACE

As noted, for domestic law purposes, the most obvious tension between *ex ante* controls over digital speech and current law is with respect to the First Amendment's public forum doctrine, which analyzes private-party speech rights by asking whether the space in which the communication takes place has historically been open to or established for citizen speech by the State.⁸⁰ Consequently, the First Amendment decision point for courts is an analysis of the common space in which the speech is spoken and received. Forum doctrine thus leaves courts illequipped to deal with *ex ante* speech controls over digital communications, where the space between speech and its receipt have been delinked.

A. Why Have a Public Forum Doctrine?

The public forum doctrine first developed in the context of protests against government policies taking place in public spaces. In its 1937 decision in *Hague v. Committee for Industrial Organization*, the Supreme Court for the first time affirmed the principle that "streets and parks . . . have immemorially been held in trust for the use of the

⁷⁸ S. 3480, 111th Cong. § 249 (2010). In response to outcry comparing the power granted the President by the bill to President Mubarak's shutdown of Internet service in Egypt, the next draft of the bill, retitled the Cybersecurity and Internet Freedom Act of 2011, expressly stated that "neither the President . . . or any officer or employee of the United States Government shall have the authority to shut down the Internet." S. 413, 112th Cong. §2 (2011). *See also* MACKINNON, *supra* note 9, at 75; Jon Stokes, *President's Veto Power Over Internet Removed in Amended Bill*, ARSTECHNICA (Mar. 22, 2010, 10:30 AM), http://arstechnica.com/tech-policy/2010/03/ presidents-veto-power-over-internet-removed-in-amended-bill.

⁷⁹ Rendell-Baker v. Kohn, 457 U.S. 830, 832–37 (1982).

⁸⁰ See *supra* Part I.

public . . . for purposes of assembly, communicating thoughts between citizens, and discussing public questions."81 The principle's strongest theoretical underpinning, however, was provided more than twenty-five years later by Harry Kalven, Jr., in his seminal article, The Concept of the Public Forum: Cox v. Louisiana.⁸² In the article, Kalven considered a pair of civil rights cases from the mid-1960s, Edwards v. South Carolina⁸³ and Cox v. Louisiana.⁸⁴ Both Edwards and Cox involved protests by African American students in public spaces in Southern cities (namely, on the State House in Columbia in Edwards and on the State Capitol Building in Baton Rouge in Cox).85 Though the relevant convictions in both cases were overturned as violations of the First Amendment on a variety of grounds, Kalven used Edwards and Cox to argue for a more consistent approach, one that protected speech not because of the speech's merits or message, but rather based on the property on which it occurred, and the public's right to access that property for communication⁸⁶:

[I]n an open democratic society the streets, the parks, and other public places are an important facility for public discussion and political process. They are in brief a public forum that the citizen can commandeer; the generosity and empathy with which such facilities are made available is an index of freedom.⁸⁷

A street or park should be considered a space for speech and assembly free of government interference, Kalven continued, when "the citizen [is] using the street as a forum and not a passageway," and that use is not "anomalous."⁸⁸ In other words, by continually using a public space for speech and assembly, citizens earn "a kind of First-Amendment easement" within the space, from which the State cannot evict them. Citizens thus earn a continuing right to speak and assemble in public parks and streets because prior like use of those spaces by other citizens has earned a collective and perpetual speech easement by prescription—that is, an open, continuous use of the space by speakers and listeners by the landowner the State—which can be used not only by *those* citizens, but by others that will follow. The converse of the easement analogy also holds, however: as *Hague* recognized and

⁸¹ U.S. 496, 515 (1939).

⁸² Harry Kalven, Jr., *The Concept of the Public Forum:* Cox v. Louisiana, 1965 SUP. CT. REV. 1 (1965).

⁸³ 372 U.S. 229 (1963).

⁸⁴ 379 U.S. 536 (1965).

⁸⁵ Kalven, *supra* note 82, at 4–5.

⁸⁶ See id. at 11–12, 23.

⁸⁷ Id. at 11–12.

⁸⁸ Id. at 12.

other cases have affirmed since, if a space has not long been used for speech, no First Amendment easement has been earned, and restrictions on dissemination and receipt of speech in the space need only be reasonable and unrelated to the prospective speaker's views.⁸⁹

Subsequent refinements of the public forum doctrine have minimized tradition's firm hold on the First Amendment's application in public spaces. While traditional public forum analysis looks to history, finding a designated public forum requires an assessment of government intent-namely whether the State intends that citizens have 'general access" to a space not historically used for public discourse.⁹⁰ To extend Kalven's metaphor, a public forum of this type is a speech easement by designation, with the State, as the designee, unilaterally establishing the class of intended users, as well as the terms, conditions, and duration of use of the easement.91 Over time, extensions of the designated public forum doctrine have also relaxed the "physical situs" requirement for the forum itself, finding that a "particular means of communication" can, at least in theory, be designated as a public forum by the State; the Court has characterized such fora as metaphysical in nature.92 In contrast to all of these rules, if the public property in question is found to fall into neither category of public forum, it can be "closed to free speech as long as the government intends it to be closed," provided that the exclusion is reasonable and not viewpointbased.93

As the public forum doctrine's First Amendment easement legacy demonstrates, the doctrine manifests the principle that managing public spaces involves policy judgments as to the appropriateness of those

⁸⁹ See Hague v. Comm. For Indus. Org., 307 U.S. 496 (1939); see also Kalven, supra note 82, at 13.

⁹⁰ Arkansas Educ. Television Comm'n v. Forbes, 523 U.S. 666, 677 (1999). Some Court opinions have intimated that designated public fora can be further categorized into "unlimited" and "limited." *See* Int'l Soc'y for Krishna Consciousness, Inc. v. Lee, 505 U.S. 672, 678 (1992). The meaning and import of the limited public forum category is by no means clear. *See, e.g.,* Marc Rohr, *The Ongoing Mystery of the Limited Public Forum*, 33 NOVA L. REV. 299, 303–20, 332–36 (2009). It appears to be correct, however, that a limited public forum is a designated public forum that is open to a limited "class of speakers," or "to the discussion of certain subjects." *Forbes*, 523 U.S. 666, 677 (1999); Hotel Emps. & Rest. Emps. Union v. City of N.Y. Dep't of Parks & Recreation, 311 F.3d 534, 545–46 (2d Cir. 2002). The ICT networks discussed in this Article are not so limited, but rather are (or should be) presumptively open to all citizens with the technical ability and equipment to access them. This Article therefore does not discuss the limited/unlimited distinction in any detail.

⁹¹ See Widmar v. Vincent, 454 U.S. 263, 267–68 (1981) ("[Having] created a forum generally open for use by student groups . . . the University has assumed an obligation to justify its discriminations and exclusions under applicable constitutional norms. The Constitution forbids a State to enforce certain exclusions from a forum generally open to the public, even if it was not required to create the forum in the first place.").

⁹² See Cornelius v. NAACP, 473 U.S. 788, 801–02 (1985).

⁹³ David S. Day, *The Public Forum Doctrine's 'Government Intent Standard': What Happened to Justice Kennedy*?, 2000 L. REV. MICH. ST. U. DET. C. L. 173, 177 (2000).

spaces for discourse. Embedded in the State's exclusion of speakers from a space is a determination that the values gained by opening the space for speech would be outweighed by the inconvenience to the space's primary purpose. The U.S. Supreme Court has said that "[t]he crucial question," for public forum doctrine purposes, is "whether the manner of expression is basically incompatible with the normal activity of a particular place at a particular time."⁹⁴ As Kalven notes, although the streets and parks have been "a meeting place for free men from time out of mind, [they] are also dedicated to other uses, such as travel."95 So even where a forum is traditional-even where the easement has been earned—if the primary use of a space is inconsistent with speech, the speech use will usually give way to the primary use. However, managing space is also a method for managing dissent. Physical space theorists have discussed how speech can be demarcated through space management. For example, David Allen writes, "the concept of place was built not only on the importance of protecting individual speech, but also on the ability of citizens to gain access to diverse ideas."96 Where the State itself makes the determination as to a space's intended use, and that choice supplies the rule of decision to a reviewing court, it is difficult to see a path for new speech easements to be earned or granted. As Justice Kennedy has noted,

[Relying on government intent to determine when a forum has been designated for speech use] leaves the government with almost unlimited authority to restrict speech on its property by doing nothing more than articulating a non-speech-related purpose for the area, and it leaves almost no scope for the development of new public forums absent the rare approval of government.⁹⁷

B. Why Cyberspace is not a Public Forum

Despite some First Amendment scholars' efforts to devise arguments to the contrary,⁹⁸ the conclusion that a State-offered

 $^{^{94}}$ U.S. Postal Serv. v. Council of Greenburgh Civic Ass'ns, 453 U.S. 114, 136 (1981) (quoting Grayned v. City of Rockford, 408 U.S. 104, 116 (1972)).

⁹⁵ Kalven, supra note 82, at 26.

⁹⁶ David S. Allen, *Spatial Frameworks and the Management of Dissent: From Parks to Free Speech Zones*, 16 COMM. LAW & POLICY 383, 420 (2011); *see also* Joseph Blocher, *Government Property and Government Speech*, 52 WM. & MARY L. REV. 1413, 1431 (2011) ("[G]overnments regulate speech by regulating places and things.").

⁹⁷ Int'l Soc'y for Krishna Consciousness, Inc. v. Lee, 505 U.S. 672, 695 (1992) (Kennedy, J., concurring); *see also* Gey, *supra* note 16, at 1559.

⁹⁸ See, e.g., Gey, supra note 16, at 1611–14 ("'Through the use of Web pages, mail exploders, and newsgroups, the . . . individual can become a pamphleteer.") (quoting Reno v. Am. Civil Liberties Union 521 U.S. 844, 870 (1997)); see id. at 1618–20 (noting that the Internet was created by the federal government as part of a 1969 Department of Defense/Advanced Research Project Agency effort). For more on the latter point, see TIM WU, THE MASTER SWITCH 197–203 (2010) (discussing ARPANET's leasing of long-distance phone lines from AT&T for development of Internet).

communications network would not be a traditional public forum seems beyond meaningful dispute. Time and again, the Supreme Court has declined to find a government space being used for speech to be a traditional public forum on the ground the space has not, in the words of *Hague*, been "held in trust for the use of the public . . . for purposes of assembly, communicating thoughts between citizens, and discussing public questions."⁹⁹ The modernity or recency of a space, and its availability, renders it a "nontraditional" forum as a matter of course. Alternatively, to use Kalven's more analytically helpful formulation, no speaker can earn a speech easement in a public space that the State has recently established—even if the establishment is in part for the purpose of facilitating speech.

The determinative nature of the doctrine's "time immemorial" factor was in full bloom in *International Society of Krishna Consciousness v. Lee*, in which the Court held that a public airport terminal was not a public forum and thus the airport authority's banning of solicitation in the terminal need only have been reasonable.¹⁰⁰ The Court found that "given the lateness with which the modern air terminal has made its appearance, it hardly qualifies for the description of having 'immemorially... time out of mind' been held in the public trust and used for the purposes of expressive activity."¹⁰¹ Further, because soliciting in those terminals was an even newer development, the forum was a doubly nontraditional one for First Amendment purposes.¹⁰²

Of course, one feature distinguishing the airport terminal in *Lee* from a State-provided communications network is that while the former is established to "[facilitate] passenger air travel," the latter is arguably established for "the [very] promotion of expression."¹⁰³ Sound arguments can thus be made that even with *Lee* governing on the "time immemorial" question, a State communications network is a designated public forum. However, in the case of State-provided Internet access, *United States v. American Library Association* held to the contrary.¹⁰⁴ Though the lower court in that case found that library-provided Internet access created a designated public forum because it was intended to provide the public with "a wide range of information" for dissemination and receipt, the Supreme Court disagreed.¹⁰⁵ It did so by focusing on the speaker side of the alleged First Amendment easement, which it found lacking. The Court found that libraries did not provide Internet terminals as a vehicle of expression for the developers of sites accessed

⁹⁹ Hague v. Comm. For Indus. Org., 307 U.S. 496, 515 (1939).

^{100 505} U.S. 672 (1992).

¹⁰¹ Id. at 672-73.

¹⁰² *Id*.

¹⁰³ *Id.* at 682.

¹⁰⁴ 539 U.S. 194 (2003).

^{105 201} F. Supp. 2d. 401, 457 (E.D. Pa. 2002), rev'd, 539 U.S. 194.

via those terminals, but rather "to facilitate research, learning, and recreational pursuits" for *patrons*.¹⁰⁶ Providing Internet access at library terminals no more designates a public forum, the Court held, than "collect[ing] books" designates a "public forum for the authors of [the] books to speak."¹⁰⁷ The Court decided that the provision of Internet access was not intended to foster the speech of website developers, and found no intent to open a communications channel between those developers and library patrons; thus no public forum was designated by the State. The library network was provided to *access* information, not *exchange* it.

Even an analogy to library terminal Internet access is imperfect for present purposes. It may be that users access the Internet via a library network or a municipally provided WiFi connection in much the same way; but as the Court in American Library Association noted, both an intended class of speakers and an intended class of listeners are needed for government to designate a First Amendment easement over its property. Indeed, the closest present-day analogue to a State-provided Internet network is likely not a park, capital ground, airport, library, or activities' fee. but rather a two-way government-provided communications service that has long been with us: the postal system. The Supreme Court analyzed whether the federal government's provision of postal service designated a public forum in United States Postal Service v. Greenburgh Civic Associations,¹⁰⁸ and the answer there was no.

The statute at issue in *Greenburgh* barred the placement of mailable matter lacking postage in individual citizens' mailboxes. The civic organizations challenging the statute claimed that when the government designated a mailbox an "authorized depository" for federally carried mail, a designated public forum was created. But the Court disagreed. "[T]he First Amendment," the Court held, "does not guarantee access to property simply because it is owned or controlled by the government." Moreover, the government's interest in "facilitating the secure and efficient delivery of the mails" outweighed the speaker's right to use government property to reach its intended audience.¹⁰⁹ The Court found that its cases did not support the "sweeping proposition" that "simply because an instrumentality is used for the communication of ideas and information, it thereby becomes a public forum."¹¹⁰ A finding that, for example, "a bulletin board in a cafeteria at Fort Dix" or state-provided advertising space on city rapid transit cars were public

^{106 539} U.S. at 206.

¹⁰⁷ *Id.*

¹⁰⁸ 453 U.S. 142 (1981).

¹⁰⁹ *Id.* at 129.

¹¹⁰ Id. at 130 n.6.

fora merely because the government was providing a venue for communication in such cases would turn all manner of public facilities into "Hyde Parks open to every would-be pamphleteer and politician." This was, the Court found, a state of affairs that the Constitution "does not require."111 Similarly, in Perry Educational Association v. Perry Local Educators' Association, the Court found that the First Amendment was not violated when a school district barred an uncertified teachers' union from accessing its internal mail system.¹¹² In fact, the case for a public forum finding was even weaker there, since access to the teachers' mailboxes was arguably not as open to the public as those at issue in *Greenburgh*. Accordingly, the public forum doctrine does not infringe upon the State's right to manage communications traffic along its instrumentalities (including its authority to exclude certain traffic pursuant to that right); the mere provision of such an instrumentality is not prima facie evidence that the State has designated the instrumentality as a public forum to which strict scrutiny would apply to interferences with speech.

In dissenting from the Court's public forum holding in *Greenburgh*, Justice Brennan characterized the "mails" in nearly the same terms as are used to analogize the Internet to a public forum now:

The mails and the letterbox are specifically used for the communication of information and ideas, and thus surely constitute a public forum appropriate for the exercise of First Amendment rights

The history of the mails as a vital national medium of expression confirms this conclusion. Just as streets and parks [have been used for time immemorial for assembly, discussion, and communication], so too the mails from the early days of the Republic have played a crucial role in communication \dots ¹¹³

Likewise, Justice Marshall argued that the Postal Service's "very purpose is to facilitate communication," and it is thus a public forum.¹¹⁴

¹¹¹ Id.

^{112 460} U.S. 37 (1983).

¹¹³ Greenburgh, 452 U.S. at 137–38 (Brennan, J., concurring).

¹¹⁴ *Id.* at 148 (Marshall, J., dissenting). One might distinguish the distribution of mail in *Greenburgh* from a State-provided communications network on the ground that the intended use was inconsistent with the use for which the State provided the forum. In other words, the respondent's First Amendment claim failed because he intended to "speak" by placing an unmetered piece of mail into a letterbox, and the respondent intended the mail system only for "speech" via metered mail. But it is difficult to see how the deposit of an unmetered piece of mail is incompatible with metered mail's delivery and deposit, and in any event the majority did not rely on the forum doctrine's incompatibility rule. And for *Greenburgh* to be so read, one must first determine that the mails and letterboxes constitute a public forum, which the Court did not do. *See id.* at 136–38 (Brennan, J., concurring) (criticizing the majority opinion for failing to meaningfully analyze whether respondent's use was incompatible with government's intended use for the mail system); *id.* at 150–51 (Marshall, J., dissenting) (criticizing the majority opinion

But as *Greenburgh* first signaled, the Court's willingness to find forum designation for State-provided speech channels was on its way to desuetude.

In Denver Area Educational Television Consortium v. FCC, seven Justices, including three of the current five that participated in the decision, declined to apply the public forum doctrine to leased-use and public access channels that the Cable Act of 1992 mandated cable television systems to establish. The plurality in Denver Area argued that "import[ing] law developed in very different contexts into a new and changing environment" deprives the government "the flexibility necessary... to respond to very serious practical problems."¹¹⁵ Later decisions have thus followed Greenburgh's reluctant path with respect to finding that the State has designated a nonphysical space a public forum, or, for that matter, with respect to finding any type of space a designated public forum. As Mark Rohr has noted, the Supreme Court "has not found a governmental property to be ... a designated public forum since Widmar [v. Vincent] in 1981."116 As Denver Area Consortium makes clear, the Court's refusal to find new speech spaces as traditional public fora has bled into its designated public forum analysis. The erosion of forum doctrine's categorical approach to speech rights on public property thus seems complete.

Given the decisions in *American Library Association*, *Greenburgh*, and *Denver Area Consortium*, it is clear that a government does not designate a public forum when it merely provides an "instrumentality... for the communication" of ideas.¹¹⁷ We are thus left with a doctrine that protects only those speech channels that the State, in its own judgment, deems either sufficiently time-honored or sufficiently worthy of protection. But letting State intent be the guiding principle for

using an analysis similar to Brennan's).

¹¹⁵ Denver Area Educ. Telecomm. Consortium v. FCC, 518 U.S. 727, 740 (1996) (plurality opinion of Breyer, J.); *see also id.* at 768 (Stevens, J., concurring) ("I am convinced that it would be unwise to take a categorical approach to the resolution of novel First Amendment questions arising in an industry as dynamic as this."); *id.* at 774 (Souter, J., concurring) ("[N]ot every nuance of our old standards will necessarily do for the new technology, and . . . a proper choice among existing doctrinal categories is not obvious"); *id.* at 779–81 (O'Connor, J., concurring) ("[W]e should not yet undertake fully to adapt our First Amendment doctrine to the new context we confront here."); *id.* at 829–30 (Thomas, J., concurring in the judgment in part and dissenting in part, joined by Scalia, J., and Rehnquist, C.J.) ("We have expressly stated that neither government ownership nor government control will guarantee public access to property. . . . [U]nlike a park picketer, an access programmer cannot transmit its own message. Instead, it is the operator who must transmit, or 'speak,' the access programmer's message.").

¹¹⁶ Rohr, *supra* note 91, at 335. For a discussion of the inapplicability of the "metaphysical public forum" cases to ICT speech, see *infra* Part IV.

¹¹⁷ Cornelius v. NAACP, 473 U.S. 788, 803 (1985).

designated public forum analysis has turned the doctrine into a dead letter for speakers' rights. As Justice Blackmun presciently argued nearly thirty years ago, "if the exclusion of some speakers is evidence" that the government did not intend to designate its property a public forum, "no speaker challenging that denial of access will ever be able to prove" that the property was a public forum at all.¹¹⁸

With this in mind, Part IV argues that in the context of digital speech, we should cheer the doctrine's demise, but strive to retain protection for those speech-related interests the doctrine was developed to defend.

IV. OVERCOMING THE PUBLIC FORUM DOCTRINE

The public forum doctrine is intended to preserve the public's access to government speech spaces. But when speech becomes disassociated from space by technology, the necessary task is to locate the citizens' right to speak and receive information outside of the physical situs where the speech act began.

A. Retaining a Place for the First Amendment: The Common Carriage Nondiscrimination Principle

1. Common Carriage as First Amendment Policy

Because it asks the wrong questions, public forum doctrine cannot provide the answer when determining how to adequately safeguard digital speech on State-provided networks. However, we can look to the government's own practices—in particular, its imposition of common carriage obligations on private entities—to justify affirmative protections for networked communications.

Common carriage, a product of English common law, is nearly 800 years old. The nondiscrimination principles undergirding it have historically been imposed by the government on those private industries that are "affected with [the] public interest"¹¹⁹—public utility services, such as electricity and natural gas, as well as businesses that carry or facilitate carriage of "persons or goods from place to place" without discrimination against or transformation of the carried person or good.¹²⁰ As manifested in 1887's Interstate Commerce Act ("ICA"), government oversight in the area is intended to ensure that "[the actors in those industries] provided services in standardized packages at standardized prices to all similarly situated end-users and to ensure that

¹¹⁸ Id. at 825 (Blackmun, J., dissenting).

¹¹⁹ Chas. Wolff Packing Co. v. Court of Indus. Relations of State of Kansas, 262 U.S. 522, 535 (1923).

¹²⁰ Thomas B. Nachbar, The Public Network, 17 COMMLAW CONSPECTUS 67, 76 (2008).

those services [a]re reliable."¹²¹ The principle was born out of the railroads' "unequal treatment of particular shippers, localities, and commodities";¹²² as the Senate Report concerning the proposed ICA legislation noted, discrimination was "the principal cause of complaint against the management and operation of the transportation system of the United States."¹²³ The Senate's affirmance of the federal interest in nondiscrimination in railroad service began by first establishing the industry's role in carrying America to modernity; this was done in mellifluous terms so similar to those used in today's discussions of the Internet that it merits quoting them at length:

The present century has witnessed the introduction of new forces in every department of civilized life, but none have brought about more marvelous changes than has the railroad as an aid to and an instrumentality of commerce. The commercial, social, and political relations of the nations have been revolutionized almost within the last fifty years by the development of improved means of communication and transportation. Previous to that period each nation lived almost wholly within itself. There was little intercommunication, and exchanges of products were limited to an extent that can to-day scarcely be realized.¹²⁴

Nondiscriminatory access to the rails, then, was compelled by the importance of the large-scale changes that rail travel had wrought in the country: unequal access to the rails equated to unequal access to progress itself. If the State took no action, it would effectively sanction discriminatory practice and allow the victims of discrimination to be left behind. Based on this same rationale, the federal government expanded the ICA's common carriage requirements to wireless and wired telephone and telegraph service providers in 1910's Mann-Elkins Act,¹²⁵ and reaffirmed telephone companies' common carriage status via Title II of the Communications Act of 1934.¹²⁶ Here too, the duty imposed on the provider was to serve all who seek the service, and to

¹²¹ Joseph D. Kearney & Thomas W. Merrill, *The Great Transformation of Regulated Industries Law*, 98 COLUM. L. REV. 1323, 1325 (1998); Interstate Commerce Act, ch. 104, 24 Stat. 379 (1887) (repealed by numerous enactments and amendments).

¹²² Kearney & Merrill, *supra* note 121, at 1332.

¹²³ *Id.* (quoting Report of the Senate Select Committee on Interstate Commerce, S. REP. NO. 49-46, at 182 (1886) [hereinafter Collum Report]).

¹²⁴ Collum Report, *supra* note 123, at 3.

¹²⁵ H.R. 17536, 61st Cong., ch. 309, § 7 (2d Sess. 1910).

¹²⁶ See 47 C.F.R. § 21.2 (2007) (defining "communication common carrier" as "[a]ny person engaged in rendering communication service for hire to the public"); see also Kenneth A. Cox & William J. Byrnes, *Title II: The Common Carrier Provisions—A Product of Evolutionary Development, in* A LEGISLATIVE HISTORY OF THE COMMUNICATIONS ACT OF 1934 25, 25 (1989) ("Central to the body of common law [on which the ICA relied] was the principle that no common carrier has the right to discriminate between persons or places, or to give preferences in any manner.").

not disclose the goods or information carried to any party but its recipient.¹²⁷

The obligations imposed upon a common carrier by the State are thus now well-established: serve all customers, carry all traffic, and discriminate against neither, regardless of the identity of the customer or the content of the traffic.¹²⁸ Courts have adopted essentially the same characteristics in defining a common carrier:

The primary *sine qua non* of common carrier status is a quasi-public character, which arises out of the undertaking to carry for all people indifferently. This does not mean that the particular services offered must practically be available to the entire public; a specialized carrier whose service is of possible use to only a fraction of the population may nonetheless be a common carrier if he *holds himself out to serve indifferently all potential users* A second prerequisite to common carrier status [is] ... that the system be such that customers transmit intelligence of their own design and choosing.¹²⁹

Businesses "affected with the public interest" thus agree to follow nondiscrimination principles as a condition of the privilege of carrying the public's traffic. The issue of whether such obligations should be imposed on *private* broadband service providers is a contentious one, and beyond the scope of this Article.¹³⁰ But where these characteristics are present in a *State*-provided service, the government often imposes common carrier-type obligations on itself. Government has long provided access to numerous goods and services "indifferently [to] all potential users" without "individualized decisions in particular cases whether and on what terms to serve" those users," from roads and highways to waterways to national parks.¹³¹ And at least since the Continental Congress's assumption of control over the post, States have

¹²⁷ *Id.*; *see also* Mans-Elkins Act, H.R. 17536, Sec. 12 ("It shall be unlawful for any common carrier subject to the provisions of this Act . . . knowingly to disclose to or permit to be acquired by any person or corporation other than the shipper or consignee, without the consent of such shipper or consignee, any information concerning the nature, kind, quantity, destination, consignee, or routing of any property tendered or delivered to such common carrier for interstate transportation").

¹²⁸ Richard S. Whitt, *Evolving Broadband Policy: Taking Adaptive Stances to Foster Optimal Internet Platforms*, 17 COMMLAW CONSPECTUS 417, 473 (2009) (citing Nachbar, *supra* note 120, at 67).

¹²⁹ Sw. Bell Tel. Co. v. FCC, 19 F.3d 1475, 1480 (D.C. Cir. 1994); *see also* Nat'l Ass'n of Broadcasters v. FCC, 740 F.2d 1190, 1203 (D.C. Cir. 1984) ("[T]he *sine qua non* of a common carrier is to accept applicants on a non-content oriented basis."); Nat'l Ass'n of Regulatory Util. Comm'rs v. FCC, 525 F.2d 630, 641–42 (D.C. Cir. 1976); Verizon v. FCC, No. 11-1355, slip op. at 47–49 (D.C. Cir. Jan. 14, 2014).

¹³⁰ See, e.g., Nat'l Cable & Telecomms. Ass'n. v. Brand X Internet Servs., 545 U.S. 967 (2005) (upholding the FCC's decision not to classify cable Internet providers as common carriers).

¹³¹ Jonathan S. Marashlian et al., *The Mis-Administration and Misadventures of the Universal Service Fund*, 19 COMMLAW CONSPECTUS 343, 368 (2011); *see also* Nachbar, *supra* note 120, at 73–74.

recognized that an important aspect of the right to carriage was freedom from carrier interference.¹³² Nondiscriminatory service in message delivery served what would later be widely recognized as First Amendment-serving interests; as Revolutionary leader Benjamin Rush stated in his 1787 "Address to the People of the United States," "knowledge of every kind" needed to be distributed "through every part of the United States" to "adapt the principles, morals, and manners of our citizens to our republican form of government."¹³³ More recent statements in Supreme Court opinions confirm the relation between nondiscrimination in common carriage and the Speech Clause's protections, finding that "precluding a common carrier from transmitting protected speech is subject to strict scrutiny."¹³⁴

Though the fact that the State carries messages compels nondiscriminatory conduct as to its treatment of those messages, it is not public forum doctrine that makes it so. Let us return to our most analogous government-provided communications network: the post office. For the reasons discussed in Part III.B. *supra*, following *Greenburgh*, a court would not find that the system of mail delivery is itself a public forum. But as mentioned immediately above, and much like Internet access, the mail itself has long been understood to serve a First Amendment value independent of the forum where the speech takes place—the right to send and receive information.

In Lamont v. Postmaster General, a federal statute empowered the

¹³² See Adam Candeub & Daniel McCartney, *Law and the Open Internet*, 64 FED. COMM. L.J. 493, 534 (2012) (citing An Ordinance for Regulating the Post Office of the United States of America, J. Cont'l. Cong. 1774–1789, at 670, 671 (Gaillard Hunt ed., 1914) ("And be it further ordained by the authority aforesaid, that the Postmaster General, his clerk or assistant, his deputies, and post and express-riders, and messengers, or either of them, shall not knowingly or willingly open, detain, delay, secrete, embezzle or destroy, or cause, procure, permit or suffer to be opened, detained, delayed, secreted, embezzled or destroyed any letter or letters")).

¹³³ PAUL STARR, THE CREATION OF THE MEDIA 88 (2004) (internal quotation marks omitted). This principle was manifested in the Postal Clause's granting of a public monopoly in postal service to the Congress. U.S. CONST. art. I, § 8, cl. 7. "This provision," writes Ithiel de Sola Pool, "put the federal government in the common carrier business." ITHIEL DE SOLA POOL, TECHNOLOGIES OF FREEDOM 17 (1983).

¹³⁴ Denver Area Educ. Telecomm. Consortium v. FCC, 518 U.S. 727, 797 (1996) (Kennedy, J., concurring in part, concurring in the judgment in part, and dissenting in part) (citing Sable Communics. of Calif. v. FCC, 492 U.S. 115, 131 (1989)). Common carriage can also be understood to protect a positive rights-based First Amendment-related interest complementary of the negative rights-based interests that Speech Clause scholars traditionally invoke:

[[]T]he law of common carriage protects ordinary citizens in their right to communicate. The traditional law of a free press rests on the assumption that paper, ink, and presses are in sufficient abundance that, if government simply keeps hands off, people will be able to express themselves freely. The law of common carriage rests on the opposite assumption that, in the absence of regulation, the carrier will have enough monopoly power to deny citizens the right to communicate.

DE SOLA POOL, *supra* note 133, at 106, *noted in* Ellen P. Goodman, *Bargains in the Information Marketplace: The Use of Government Subsidies to Regulate New Media*, 1 J. ON TELECOMM. & HIGH TECH. L. 217, 228 n.34 (2002).

Postmaster General to confiscate foreign-originated mail that he deemed to be "Communist propaganda."¹³⁵ The intended recipients of such mail were notified by the Postmaster and could request delivery. The named petitioner in *Lamont*, a pamphleteer who in 1963 received notice of the Post Office's detention of his copy of the *Peking Review*, sought to enjoin the statute's enforcement, arguing that it violated his First Amendment rights to receive information. The Supreme Court unanimously agreed. In so doing, it quoted language from Justice Holmes that could as easily describe a citizen's right to information over a State-provided communications network: "The United States may give up the post-office when it sees fit, but while it carries it on the use of the mails is almost as much a part of free speech as the right to use our tongues"¹³⁶

And in his *Lamont* concurrence, Justice Brennan affirmed Lamont's right to receive information using language similarly reminiscent of current disclosure: "The dissemination of ideas can accomplish nothing if otherwise willing addressees are not free to receive and consider them. It would be a barren marketplace of ideas that had only sellers and no buyers."¹³⁷ By affirming the essentiality of the two-way nature of communication, the Court was tapping into principles recognized at least since Jefferson.¹³⁸

In *Lamont*, the Court recognized the complementary nature of the State's nondiscriminatory carriage obligations and the First Amendment.¹³⁹ Common carriage-like treatment of State networks is also complementary of the "end-to-end," or "e2e," conception of the Internet, which calls for network operating protocols to treat all data equally—to "pass all packets"—as it moves along the network.¹⁴⁰ Technologists support the principle that the "intelligence" of a network, or more precisely the ability to identify, categorize, sort, and value passing information, should be located at the network's edges, not along its route.¹⁴¹ End-to-end as a design principle is credited by its advocates with nearly every Internet-related innovation we currently enjoy, from

¹³⁵ 381 U.S. 301 (1965).

¹³⁶ United States *ex rel.* Milwaukee Soc. Democratic Pub. Co. v. Burleson, 255 U.S. 407, 437 (1921) (Holmes, J., dissenting).

¹³⁷ Lamont, 381 U.S. at 308 (Brennan, J., concurring).

¹³⁸ See Hannibal Travis, *The FCC's New Theory of the First Amendment*, 51 SANTA CLARA L. REV. 417, 484 (2011) ("[F]ree correspondence between citizen and citizen' is a 'natural right'...'') (quoting Letter from Thomas Jefferson to Colonel James Monroe, *in* 9 THE WRITINGS OF THOMAS JEFFERSON 422 (Library ed. 1903)).

¹³⁹ Lamont, 381 U.S. at 306–07.

¹⁴⁰ See John G. Palfrey, Jr. & Robert Rogoyski, *The Move to the Middle: The Enduring Threat of "Harmful" Speech to the End-to-End Principle*, 21 WASH. U. J.L. & POLY 31, 32 (2006); see also BARBARA VAN SCHEWICK, INTERNET ARCHITECTURE AND INNOVATION 383–87 (2010); Nicholas P. Dickerson, *What Makes the Internet So Special? And Why, Where, How, and By Whom Should its Content be Regulated?*, 46 HOUS, L. REV. 61, 70 (2009).

¹⁴¹ Palfrey & Rogoyski, supra note 140, at 32; Reicher, supra note 11 at, 736–37.

the rise of the application economy to the increase in our capacity for self-determination through networked interactions.¹⁴² End-to-end also aligns with First Amendment values of information exchange and receipt—values that the State, as discussed, respects as a matter of course when providing access to speech spaces outside the ICT context. Accordingly, a State committed to end-to-end network design principles will give constitutional breathing space to the speech traffic carried over those networks.

Lodging *all* the intelligence of a network at its endpoints, however, can come at the expense of stability, in the form of viruses or other malware developed at one user end. Viruses can infect not only the network, which can be rendered powerless to stop such harms at the transmission level because of an over-commitment to end-to-end, but also users' devices at other ends.¹⁴³ Of course, these infections interfere with other users' speech over the network as well; we might call this a "hacker's veto" problem. Accordingly, as discussed in more detail below,¹⁴⁴ the State network operator should be free to make content-neutral technical management decisions that have the effect of keeping a network safe and operable. To return to our post analogy, it does not necessarily implicate the First Amendment for the government to limit the mail system to letters and parcels.

2. Forum Doctrine Protects Places, Not Speech—And That's The Problem

The right to receive information affirmed in *Lamont* and other cases suggests another reason why public forum doctrine is inadequate to provide meaningful protection to ICT-enabled speech.¹⁴⁵ Recall the two models of communication from Part I above. In applying the public forum doctrine to the second, ICT-based communications model, the Speaker's rights to speak will likely be demarcated with reference to the space in which *she* speaks, rather than any forum-based analysis of the publicly owned or provided communications channel that the Speaker uses to reach her audience. Accordingly, BART's public forum analysis—that it owns its train platforms, but those platforms are provided primarily for transport and not for communication¹⁴⁶—is likely

¹⁴² See, e.g., VAN SCHEWICK, supra note 140, at 362–63; BENKLER, supra note 42, at 130–31; Mark A. Lemley & Lawrence Lessig, *The End of End-to-End: Preserving the Architecture of the Internet in the Broadband Era*, 48 UCLA L. REV. 925, 928–29 (2001).

 ¹⁴³ See Jonathan L. Zittrain, *The Generative Internet*, 119 HARV. L. REV. 1974, 2030–31 (2006).
 ¹⁴⁴ See infra Part IV.E.

¹⁴⁵ See Derek E. Bambauer, Orwell's Armchair, 79 U. CHI. L. REV. 863, 944 n.371 (2012) (compiling cases that support a First Amendment "theory of audience-oriented interests").

¹⁴⁶ See BART Letter to the Public, *supra* note 47 ("BART has designated the areas of its stations that are accessible to the general public without the purchase of tickets as unpaid areas that are open for expressive activity upon issuance of a permit subject to BART's rules.").

correct, and that decides the First Amendment question against the Speaker.

However, as my ICT speech model demonstrates, the Listeners in an ICT communication do not necessarily share that space, so there is no analytical reason why restrictions on the Speaker's space should implicate the rights of Listeners as well. But silencing the Speaker via flipping of the kill switch also renders the Listener deaf for purposes of that message. The space-based interpretive frame as applied to ICT eliminates the First Amendment value of receiving speech from the doctrinal calculus. Focusing on the Speaker's space in this context excludes "society's right to have access to a wider array of messages"147-the very reason for a public forum doctrine in the first place. And perhaps most troubling, making the locus of the speaker determinative makes the listener's locus in the ICT context irrelevant. One can easily imagine a listener sitting in a quintessentially traditional public forum whose normally robust right to receive information is ignored, simply because the corresponding speaker may be deemed to have been in a nonpublic forum or even a privately owned space.

This result does violence to the policies underlying forum doctrine. In adopting forum doctrine in *Hague*, the Supreme Court recognized that the doctrine affirmed the State's right to preserve associational spaces as well as speech ones—"assembly, communicating thoughts between citizens, and discussing public questions."¹⁴⁸ As Ashutosh Bhagwat argues, even though the speaker-on-a-soapbox-in-Hyde-Park metaphor has dominated theoretical conceptions of what the doctrine seeks to protect,

such lone speakers contribute little to self-governance or other First Amendment values. Moreover, it is not clear that individual speakers really need the public forum to speak or that the public forum is the most effective way for individuals to reach an audience (especially in the age of the Internet). In fact, however, many if not most public forum cases have not involved individuals seeking access to government properties; they have involved groups wanting to use government property to assemble, to recruit, and to send a collective message to the public or to government officials....

[I]t is assembly, not the actions of a street-corner speaker, that is at the heart of the public forum doctrine.¹⁴⁹

The public forum doctrine, in other words, is meant to apply to both the speaker and the listener ends of the First Amendment

¹⁴⁷ Allen, *supra* note 96, at 420.

¹⁴⁸ Hague v. Comm. For Indus. Org., 307 U.S. 496, 515 (1939).

¹⁴⁹ Ashutosh Bhagwat, Associational Speech, 120 YALE L.J. 978, 1015–16 (2011).

easement.¹⁵⁰ But applying public forum analysis to only the speaker side of an ICT-enabled communication shuts out any consideration of listeners' rights, the speech easement is cut off at the listener end. This result betrays the very associational interest the doctrine was established to defend.

Finally, the "metaphysical public forum" line of cases alluded to above does not solve this problem.¹⁵¹ In theory, the expansion of designated public forum doctrine to include "instrumentalities of communication" as well as physical spaces could render the doctrine applicable to a State-provided ICT network. But in practice, the rightof-access metaphysical public forum rule has only been applied to bar the government from denying access to the forum for viewpoint-based reasons—a proscription that exists independent of any characteristics of the speech space. For example, in Rosenberger v. Rector & Visitors of University of Virginia, the Supreme Court held that denying funding to a religious student publication violated the First Amendment where funding was granted to other, secular organizations.¹⁵² This was so, claimed the Court, because the student activities fund from which monies were disbursed was a public forum, and thus the University could not exclude the religious magazine access to the forum on the grounds it expressed views influenced by religion. But this analysis is doing much less work than it might at first appear.

Despite Rosenberger's musings as to the possibility of a public forum doctrine whose speech spaces are "metaphysical" rather than physical in nature, viewpoint-based discrimination by the government is illegal even where no forum has been established at all.¹⁵³ Furthermore, it may be that access to a government communications network cannot be denied for viewpoint-based reasons merely because the State is the party doing the denying. But this principle only protects against selected exclusions of certain citizens who seek to distribute particular messages with which the government disagrees. It would not, however, impede shutoffs of service across a given network based on the content a particular speaker on that network wishes to communicate, or even "just-in-time" denials of transmission or service based on the content of the messages to be carried or accessed. Moreover, network shutdowns are by definition overinclusive. For example, in the case of BART, the shutdown of the network suppressed a range of speech that would in any other context have been protected, particularly communications

¹⁵⁰ Indeed, the Supreme Court in *American Library Association* overruled the lower court on this very basis. *See supra* text accompanying notes 102–105.

¹⁵¹ See supra note 114.

¹⁵² Rosenberger v. Rector & Visitors of Univ. of Virginia, 515 U.S. 819 (1995).

¹⁵³ See, e.g., Arkansas Educ. Television Comm'n v. Forbes, 523 U.S. 666, 682 (1999) ("[T]he exclusion of a speaker from a nonpublic forum must not be based on the speaker's viewpoint and must otherwise be reasonable \ldots .").

unrelated to the protest that BART sought to proscribe. Therefore, even assuming metaphysical public forum analysis would apply, the State's power to interfere with speech *ex ante* continues mostly unabated. Protection against viewpoint discrimination takes away only one avenue of interference with digital speech. By contrast, if strict scrutiny should apply to content-based discriminatory treatment of messages independent of categorical forum analysis as this Article proposes, then the overinclusive nature of system-wide shutdowns will necessarily cause such shutdowns to fail that test: "Partial service of a compelling interest is not narrow tailoring."¹⁵⁴

The law must adapt to recognize that because of ICT, speakers using government property to speak no longer necessarily share the same space as their speech. Space-based justifications for limitations on free expression can thus no longer govern in that context. To claim that a train platform is not a public space that the government has left open for citizen speech, and then to also claim authority to shut off speech that would have been sent from that platform but delivered via Stateprovided ICT and received in a variety of other spaces, is to place First Amendment formalism ahead of common sense. There is no cause to apply rules developed when a speaker and listener shared the same space to foreclose the rights of listeners who may be dozens, hundreds, or even thousands of miles away from the speaker. Even though the Supreme Court seemed unmoved by the argument that the mail system was a public forum, it has deemed the First Amendment implicated when the government denies an individual his mail because of the message contained in the envelope.

B. Content-based ICT Interferences as Prior Restraints

The two interlaced values discussed in this Part—the equal treatment value recognized in the assumption or imposition of common carriage requirements, and the First Amendment value in receiving information through assembly—compel the State's adoption of nondiscrimination principles for any system of ICT that it provides to the public. When the State offers to carry communications traffic, it should be presumptively barred from *ex ante* interferences with speech, such as selective denials of service to particular citizens or content-based network shutdowns, in the absence of a compelling governmental interest and narrow tailoring between the interest and the interference.¹⁵⁵

¹⁵⁴ Denver Area Educ. Tel. Consortium v. FCC, 518 U.S. 727, 806 (1996) (Kennedy, J., concurring in part, concurring in the judgment in part, and dissenting in part) (citing FCC v. League of Women Voters of Cal., 468 U.S. 364, 396 (1984); Fla. Star v. B.J.F., 491 U.S. 524, 540–41 (1989)).

¹⁵⁵ Along with their carriage obligations, common carriers also enjoy concomitant immunities as it relates to carried content:

A common carrier obligation necessitates a privilege to transmit defamatory material

Accordingly, where interferences in the form of service denials or shutdowns do take place, they should not be analyzed via the public forum doctrine, but rather as any other *ex ante* interference with speech—*i.e.*, as a prior restraint.¹⁵⁶

As the prior restraint cases teach, the presumption of unconstitutionality that attaches to a prior restraint can be overcome by the State if (i) the interference with citizen speech is minimal, and (ii) the State's interest is a compelling one.¹⁵⁷ In the run-of-the-mill case, a shutdown of, or targeted denial of service on, a communications network, once found to be content or viewpoint-based, will be found to be a prior restraint of speech.¹⁵⁸ But the State can still act without offending the First Amendment where its interest is significant and the blocked speech itself is unprotected by the First Amendment, such as when a municipal government knows of a credible threat of a cellphone-enabled explosive device, and the interference with speech is minimal given the potential harm, such as a targeted shutdown over a short period of time.

Content-based denials of carriage or service fall squarely within prior restraint doctrine for another important reason. As the Supreme Court has repeatedly held, one of the justifications for the presumption of unconstitutionality of a prior restraint is the lack of "procedural safeguards" that would otherwise ensure that a separate branch of government, particularly an independent court, can promptly assess the legality of speech prior to its censure.¹⁵⁹ The constitutional danger associated with a lack of procedural safeguards is ever-present in, if not inherent to, the context of speech using ICT. First is the "regulation behind the screen" problem. Because State interferences with digital

¹⁵⁷ See United States v. Progressive, 467 F. Supp. 990 (W.D. Wi. 1979).

because of the irreconcilable conflict between a duty to censor and a duty to carry everything. Accordingly, a network willing to undertake common carrier services and thus potentially subject to legally enforceable duties to serve everyone without regard to content would have a reasonable chance of avoiding liability for defamation or other tort liability.

Henry H. Perritt, Jr., *Tort Liability, the First Amendment, and Access to Electronic Networks*, 5 HARV. J.L. & TECH. 65, 95–96 (1992). Accordingly, even putting aside Tort Claims Act-related immunities for publication-related civil liability, *see* 28 U.S.C. § 2680(h) (2006), and Communications Decency Act immunity for communications carriers, *see* 47 U.S.C. § 230 (1998), a government could not be subjected to liability for private-party messages carried over its network.

¹⁵⁶ For present purposes, the concept of prior restraint applies to both major types of *ex ante* interferences with digital speech: blanket network shutdown and targeted service denial. *See* Bambauer, *supra* note 145, at 871–73 (arguing that government "soft" blocking of and degradation of access to online material can constitute a prior restraint). It also applies to interferences with speech over both State-provided and privately-provided ICT services.

¹⁵⁸ See Se. Promotions, Ltd. v. Conrad, 420 U.S. 546, 553 (1975) (holding a city's denial of use of its theater for a production of Hair on the grounds the play was "not in the best interests of the community" was an invalid prior restraint).

¹⁵⁹ Freedman v. Maryland, 380 U.S. 51, 57–58 (1965).

speech occur via the manipulation of telecommunications architecture, a user may be unable to discern that government action has barred or otherwise interfered with his speech. Unlike interferences with speech in physical space, the tools for interference are embedded within the ICT; deleting an *en route* text or tweet, or blocking an application delivering that speech, is generally less noticeable to the speaker as state action than sending a police officer to shut down a protest in a park. Judicial review of the speech interference can thus become impossible as a practical matter.¹⁶⁰ In addition, government's encouragement of third-party intermediaries to take such actions on its behalf raises the possibility of due process-related harms. As Seth Kreimer notes,

[a] system of informal private monitors encouraged by the government provides none of the due process guarantees that preserve accuracy in the public sector, and the dominant incentive of intermediaries is to protect themselves from sanctions, rather than to protect the target from censorship.... Often, neither speakers nor listeners will know that the message has not been conveyed, and there is no way to determine how dialogue has been deformed.¹⁶¹

The question of a system-wide shutdown is more complicated. As the quote from Justice Holmes above notes, there is no constitutional obligation for the State to provide its citizens mail service;¹⁶² likewise, a common carrier, whether private or public, is not compelled by law to provide carriage, only to do so without discrimination once it undertakes the task. In principle, a system-wide shutdown thus might not violate a common carriage-related nondiscrimination obligation at all. But again, generally applicable First Amendment doctrine can resolve this problem. Operators shut down their networks for a variety of reasons, for regular maintenance or lack of funds, as well as to dissuade speech and assembly. Prior restraint, with its presumption of unconstitutionality, can suss out the difference. Prior restraint analysis will also ensure that the State's stated reasons for a particular network shutdown will be examined with sufficient rigor by a reviewing court.

¹⁶⁰ See M. Ryan Calo, *Code, Nudge, or Notice?* (University of Washington School of Law Research Paper No. 2013-14, Feb. 13, 2013), *available at* http://papers.ssrn.com/sol3/ papers.cfm?abstract_id=2217013 (where government management of ICT systems makes a particular type of conduct impossible, there is often "no law to interpret or apply," and there is thus "no opportunity" for judicial review of the State's action); Zick, *supra* note 41, at 53–54 (unlike in physical space, where citizens are able to witness State efforts "to restrict public speakers and public assemblies," "neither speech on the Web nor its regulation is particularly transparent").

¹⁶¹ Kreimer, *supra* note 10, at 27–28; *see also* Jackson v. Metro. Edison Co., 419 U.S. 345, 352–56 (1974) (holding that a public utility's shut-off of petitioner's electricity was not state action, and thus petitioner had no right to procedural due process).

¹⁶² See Kreimer, supra note 10 (quoting United States ex rel. Milwaukee Soc. Democratic Pub. Co. v. Burleson, 255 U.S. 407, 437 (1921) (Holmes, J., dissenting)).

When those motivations are less than clear, as the Supreme Court has said in a different context, "the tie goes to the speaker, not the censor."¹⁶³

Perhaps the most persuasive argument for finding a reduced level of scrutiny where the network is State run is that when it provides access to ICT, the government is acting as a network operator rather than a regulator. As the Supreme Court noted in Lee, "[w]here the government is acting as a proprietor, managing its internal operations, rather than acting as lawmaker with the power to regulate or license, its action will not be subject to the heightened review to which its actions as a lawmaker may be subject."164 But "proprietors" in the First Amendment context make primarily commercially motivated decisions, not ones intended in the main to encourage or facilitate expression; as the Second Circuit noted, where a State manages its property "for the purpose of raising revenue or facilitating the conduct of its own internal business," that is, is strictly "engaged in commerce," it acts in a proprietary capacity.¹⁶⁵ On the other hand, where the government by its actions is encouraging speech "for the purpose of benefitting the public," it is acting as a regulator.¹⁶⁶ And when it decides in its regulatory capacity to not carry speech because of its content, the State also obliges itself to follow the procedural safeguard requirements of prior restraint law.¹⁶⁷

Similarly, under current First Amendment case law, public ownership of a speech space, even a virtual one, implicates the government speech doctrine. When the government successfully claims that it is conveying its *own* message in public space, it "need not comply with Free Speech Clause limits on subject matter and viewpoint discrimination," let alone content neutrality.¹⁶⁸ Following this line of argument, a municipality may claim that its ICT network, even though open for public use, in fact constitutes a platform for the municipality's own speech, and it is thus free to censor or block the messages of third parties who attempt to use that platform for any reason. The government speech doctrine thus provides immunity from First Amendment violations for interfering with citizen speech within public space, on the

¹⁶³ FEC v. Wisconsin Right to Life, 551 U.S. 449, 474 (2007).

¹⁶⁴ Int'l Soc'y for Krishna Consciousness, Inc., v. Lee, 505 U.S. 672, 678 (1992) (citing Perry Educ. Ass'n v. Perry Local Educators' Ass'n, 460 U.S. 37 (1983)). When acting as a proprietor, the State's regulations of speech need only be reasonable and viewpoint-neutral. *Lee*, 505 U.S. at 678–79.

¹⁶⁵ N.Y. Magazine v. Metro. Transp. Auth., 136 F.3d 123, 129 (1998) (quoting *Lee*, 505 U.S. 672) (internal quotation marks omitted) (citing Lehman v. Shaker Heights, 418 U.S. 298 at 303 (1974)).

¹⁶⁶ N.Y. Magazine, 136 F.3d at 129 (citing Widmar v. Vincent, 454 U.S. 263 (1981)).

¹⁶⁷ Id. at 129, 131.

¹⁶⁸ Timothy Zick, *Summum, the Vocality of Public Places, and the Public Forum*, 2010 B.Y.U. L. REV. 2203, 2204 (2010).

ground that the interference is *itself* expressive conduct by the State.¹⁶⁹ Regulatory acts become expressive ones by dint of government ownership and control over its communicative channel, in this case the public network.¹⁷⁰ In accordance with the government speech doctrine, lower courts have held that the government's "use [of] its discretion to select between the speech of third parties for presentation through communication channels owned by the government and used for government speech" can "constitute an expressive act by the government that is independent of the third-party speech."¹⁷¹

By making the government's right to speak and its right to exclude coterminous, however, this reading extends the government speech doctrine beyond even its capacious reach. Content-based distinctions among third-party speech, as manifested through network traffic management, are more analogous to regulation of private-party speech in public space than the "dramatic form of adoption"¹⁷² necessary for the government to take on third party speech as its own. Even if the government argues in a particular case that it made distinctions between speech in order to favor a message that it agreed with or sought to endorse, that endorsement alone does not constitute an expressive act. It is only where the government is clearly engaging in its own speech, such as when it selects third-party links for inclusion on its websites, the government speech doctrine is relevant.¹⁷³ In such a case, the exclusion of certain third-party speech from those spaces itself communicates a viewpoint, and can thus be considered expressive.¹⁷⁴ But where the government provides speech spaces primarily for users and not for itself, its management of those spaces cannot be deemed analogous to editorial discretion.¹⁷⁵ Otherwise, the requirement of viewpoint neutrality in public space, let alone the public forum doctrine, will be well and truly dead.

¹⁶⁹ Id. at 2213; see also Blocher, supra note 96, at 1414.

¹⁷⁰ Zick, *supra* note 168, at 2226–28. *Id.* at 2231–32 (discussing Sutliffe v. Epping School Dist., 584 F.3d 314, 329 (1st Cir. 2009)); *see also* Newton v. LePage, 789 F. Supp. 2d 172, 181 (D. Me. 2011) ("[T]he government's control over speech is the predominant consideration in the government speech analysis.") (citing *Sutliffe*, 584 F.3d at 329).

¹⁷¹ Sutliffe, 584 F.3d at 330.

¹⁷² Pleasant Grove City v. Summum, 555 U.S. 460, 474 (2009).

¹⁷³ See Page v. Lexington Cty. Sch. Dist. One, 531 F.3d 275, 283-84 (4th Cir. 2008).

¹⁷⁴ *Summum*, 555 U.S. at 487 (Souter, J., concurring in the judgment) (government speech should only be found where a reasonable observer would understand the speech at issue to be by the State, "as distinct from private speech the government chooses to oblige" by letting the private speaker use public land); *cf.* Blocher, *supra* note 96, at 1456–59 (distinguishing expressive government exclusions from nonexpressive ones).

¹⁷⁵ Of course, this is the very argument that private network operators make in opposition to net neutrality. *See supra* note 11 and accompanying text.

C. Defining a Network as "Public"

Calling for a common carrier-based rule for public Internet networks begs the question of which networks should be deemed "public." As noted above, Internet access offered by governments can take a range of forms, from the purely State-owned and -operated WiFi network or cell signal repeater service to the more common publicprivate partnerships that are arguably "public networks" in name only. Should a network that is publicly accessible yet installed and run by a private company pursuant to an agreement with a municipality nevertheless be considered public virtual space? The state action doctrine answers that question affirmatively.

When a public employee's hand is at the kill switch, so to speak, the state action question is a simple one: any interference with speech over the network is attributable to the State, and thus implicates the First Amendment.¹⁷⁶ The closer cases are those where the network servers and other necessary technology are privately owned and operated, even though the municipality offers nominal network access.¹⁷⁷ In such a circumstance, even though the private partner is the service-provider-infact, if there is a "close nexus between the State and the challenged action' that seemingly private behavior 'may be fairly treated as that of the State itself."¹⁷⁸ Facts that "bear on the fairness of such an attribution" include whether the private actor operates as a "willful participant in joint activity with the State or its agents."¹⁷⁹

Perhaps the most helpful example for present purposes is found in *Evans v. Newton.*¹⁸⁰ There, a city had transferred operational control over a park to private trustees in order to avoid desegregating it, which would have been contrary to the "for whites only" terms of the testamentary trust establishing the park.¹⁸¹ The Supreme Court found that the private trustees were state actors because the park served a primarily public purpose.¹⁸² The fact that the park was *formerly* public no doubt played a role in the Court's finding—prior to the transfer, the park was "swept, manicured, watered, patrolled, and maintained by the city," and the "momentum it acquired as a public facility" was not

¹⁷⁶ *Cf.* Memphis Light, Gas & Water Div. v. Craft, 436 U.S. 1, 11–15 (1978) (municipal utility a state actor and thus obliged to comply with Due Process Clause when terminating a citizen's service).

¹⁷⁷ *See, e.g.*, How to Connect, City of New York Parks & Recreation, NYCPARKS, http://www.nycgovparks.org/highlights/places-to-go/wi-fi/how-to-connect (last visited Oct. 16, 2013) (listing AT&T, Cablevision, and Time Warner as companies who in addition to local partner organizations help provide public WiFi access to New York City parks).

¹⁷⁸ Brentwood Acad. v. Tn. Secondary Sch. Athletic Ass'n, 531 U.S. 288, 295 (2001) (quoting Jackson v. Metro. Edison Co., 419 U.S. 345, 351 (1974)).

¹⁷⁹ Id. at 296 (quoting Lugar v. Edmondson Oil Co., 457 U.S. 922, 941 (1982)).

¹⁸⁰ 382 U.S. 296 (1966).

¹⁸¹ Id. at 297.

¹⁸² Id. at 301.

"dissipated ipso facto by the appointment of 'private' trustees."183 However, even after the transfer, the "municipality remain[ed] entwined in the management [and] control of the park," and "the nature of the service rendered the community by [the] park" was municipal in nature.¹⁸⁴ Similarly, in Public Utilities Commission of the District of Columbia v. Pollak, a private bus- and streetcar-operator whose "service and equipment [were] subject to regulation" by the District's public utilities commission was deemed to be a state actor when it provided a radio broadcast system on its vehicles that was reviewed and approved by the commission.¹⁸⁵ And in Lebron v. National Railroad Passenger Corp., the Court found that Amtrak was a state actor for First Amendment purposes when it denied access to its Penn Station billboards to a prospective advertiser seeking to lease the display space for his politically themed ad.¹⁸⁶ Though Amtrak was found to be a state actor because it was created by federal statute and the government retained authority to appoint a majority of its directors, also relevant was the fact that Amtrak was created "explicitly for the furtherance of federal governmental goals."187

The analysis in *Evans*, *Pollak*, and *Lebron* leads to the conclusion that a "public" WiFi network whose service is nonetheless supplied by a private partner should be treated as State-provided for First Amendment purposes. The "nature of the service rendered,"¹⁸⁸ to use *Evans*'s phrase, is quintessentially municipal—Internet access, provided in public places on a nondiscriminatory basis, at no cost and for no profit. Municipalities provide high-speed Internet access to meet public goals, ranging from economic development,¹⁸⁹ to public safety, education,¹⁹⁰ and reducing

¹⁸³ Id.

¹⁸⁴ Id. at 490-91.

^{185 343} U.S. 451, 454, 462-63 (1952).

¹⁸⁶ 513 U.S. 374, 374 (1995).

¹⁸⁷ *Id.* at 397. It is certainly the case that many municipal WiFi networks are creatures of statute, regardless of whether their operators-in-fact are private Internet service providers. *See, e.g.*, City Council Meeting Minutes, Salisbury, North Carolina 8–9 (Dec. 16, 2008) (item adopting Fiber to the Home Capital Project Ordinance) (on file with author); LONGMONT, COLO., ORDINANCE NO. 14.48.010 (May 7, 2013) (on file with author); LAFAYETTE, LA., ORDINANCE NO. O-230-2005 (Sept. 8, 2005) (issuing bonds for public utility's high-speed Internet access service) (on file with author).

^{188 382} U.S. at 301.

¹⁸⁹ See, e.g., City Council of Chattanooga, Tennessee, Res. No. 23446 (July 16, 2002), *available at* http://www.ilsr.org/rule/2515-2/ (finding that "local businesses consider the level of technological advancement of the City and the surrounding area when electing to remain" and that provision of "Internet services" will be "a significant, integral and necessary step in the City's economic development efforts"); *see also* Brian Fung, *How Chattanooga Beat Google Fiber by Half a Decade*, WASH. POST (Sept. 17, 2013, 9:35 AM), http://www.washingtonpost .com/blogs/the-switch/wp/2013/09/17/how-chattanooga-beat-google-fiber-by-half-a-decade/.

¹⁹⁰ See, e.g., An Act Relating to the Advancement of Cellular, Broadband, and Other Technology Infrastructure in Vermont, 2011 Vt. S. 78, No. 53, ¶ 16 (2012), *available at* http://www.leg.state.vt.us/docs/2012/Acts/ACT053.pdf.

the cost citizens pay to purely private carriers for broadband access.¹⁹¹ They enter partnerships with private entities to meet those same ends.¹⁹² Municipalities also play active roles in those services, even if they are not the service-provider-in-fact. They approve agreements with private entities to provide the service, and in many cases, they establish the terms and conditions of the service itself.¹⁹³ Additionally, a private partner's enforcement of a municipality's terms of service, including termination of a user's access for violation of those terms, demonstrates further "entwinement" between the two parties, such that the private partner is a state actor for First Amendment purposes when managing the network on the State's behalf.¹⁹⁴

The best argument against finding state action where a private Internet service company is a municipal WiFi system's serviceprovider-in-fact is that, per the doctrine's "public function" inquiry, citizen access to high-speed Internet service is not a function that has been "traditionally exclusively reserved to the State."¹⁹⁵ But even under the public function test, state action doctrine looks "not to form, but to an underlying reality."¹⁹⁶ Even if providing high-speed Internet access is not as "traditional" a government function as holding elections or exercising the power of eminent domain,¹⁹⁷ the entwinement between the State and its private partner in providing access is so complete that the user's reasonable expectation will usually be that the public network is being provided by the State, regardless of whether the State had traditionally provided the user a like service.

For example, assume that Gotham, a hypothetical American city, holds itself out as providing recycling collection services for its citizens.

¹⁹¹ See, e.g., Fiber Optic System, tit. 8, ch. 9, § 8-9-1 (City Code of Ammon, Idaho Feb. 3, 2011), http://www.ci.ammon.id.us/pdf/citycode/07012013AmmonCityCode.pdf (purpose of the law is to establish a City owned fiber optic system in order to, *inter alia*, "protect the cost of broadband services by eliminating anti-competitive pricing schemes or monopolistic practices which contribute to higher costs for broadband services.").

¹⁹² See, e.g., Wi-Fi and Cellphone Service on Subway Trains?, supra note 68. (M.T.A. framing expansion of wireless and cellphone service on trains "as a safety issue").

¹⁹³ See infra note 237 (discussing the City of Raleigh's Downtown Wi-Fi Terms of Service) (on file with author). Indeed, in some of these arrangements, the user's contractual counterparty is the State entity, not the private provider. *See id.*

¹⁹⁴ See Brentwood Acad. v. Tn. Secondary Sch. Athletic Ass'n, 531 U.S. 288, 300 (2001) (public entity and private partner "pervasively entwine[ed] to the point of largely overlapping identity"); see also Lansing v. City of Memphis, 202 F.3d 821, 829 (6th Cir. 2000) (finding that the private actor's choice is "deemed to be that of the state" when the state "exercise[s] such coercive power or provide[s] . . . significant encouragement, either overt or covert," and that this test was met when a state trooper ordered a citizen to move his vehicle). As argued *supra*, one would be hard-pressed to find a better case of "largely overlapping identity" between a State and its private partner than a municipality offering a privately provided service in the municipality's name. See Brentwood, 531 U.S. at 300.

¹⁹⁵ Jackson v. Metro. Edison Co., 419 U.S. 345, 352 (1974).

¹⁹⁶ Brentwood, 531 U.S. at 301 n.4.

¹⁹⁷ Flagg Bros. v. Brooks, 436 U.S. 149, 156 (1978); Metro. Edison Co., 419 U.S. at 353.

Assume further that despite this holding-out, the service is in fact provided, pursuant to contract, not by Gotham's sanitation department, but by a private-partner company that owns the trucks that drive the recycling route along the streets of Gotham and collect the recyclable matter left by the residents that live on that route. If the private partner opted not to collect recycling in a certain Gotham neighborhood because of the race of the residents in that neighborhood, the Fourteenth Amendment would be implicated by the denial of service, even though the actor-in-fact was a private one.¹⁹⁸ In such a case, the fact of Gotham's holding itself out as service provider is sufficient entwinement that the "action of [the private partner] may be fairly treated as that of the State itself."¹⁹⁹ Parties in a joint venture by definition share liabilities.²⁰⁰ A public-private joint venture should be no different simply because some of those liabilities are imposed by the Constitution.

Finding that a State may avoid First Amendment-derived limitations on its activity by delegating control over a public network to a private entity would favor an overly formalistic approach to state action problems, which the Supreme Court has expressly rejected.²⁰¹ This is particularly so when that State is simultaneously enjoying the public benefits of that partnership by being associated with free and ubiquitous Internet access provided under the State's name.

D. First Principle Solutions to Digital Speech Problems

1. Terrorism

While the public forum doctrine end-arounds proposed here may be more protective of digital speech, they cannot completely resolve the tensions between security and speech that bedevil any reasoned discussion of ICT. The BART example demonstrates that a State will not hesitate to assert its interest in public safety and order in regulating its communications networks, or to argue that those interests are compelling. However, as Robert Post writes, and as argued above, "[t]he issue . . . is whether these questions should be addressed through the medium of [the] public forum doctrine" rather than "ordinary principles of [F]irst [A]mendment adjudication,"²⁰² which are better

¹⁹⁸ *Cf.* West v. Atkins, 487 U.S. 42 (1988) (a medical doctor, "as a physician employed by the State of North Carolina to provide medical services to state prison inmates," acted under color of state law when providing medical services to inmate and was therefore a state actor).
¹⁹⁹ *Metro. Edison Co.*, 419 U.S. at 351.

²⁰⁰ See, e.g., Cosy Goose Hellas v. Cosy Goose USA, Ltd., 581 F. Supp. 2d. 606, 623 (S.D.N.Y. 2008).

²⁰¹ Metro. Edison Co., 419 U.S. at 352.

²⁰² Robert Post, *Between Governance and Management: The History and Theory of the Public Forum*, 34 UCLA L. REV. 1713, 1804 (1987).

equipped to analyze the actual speech, the alleged interference with it, and the motivations for that interference, including the gravity of any threat the interference was intended to allay. This is so because, as also noted above, the "public forum doctrine concerns the generic characteristics of government authority" rather than the speech or interference at issue in a given case.²⁰³

Recent history provides a concrete example of how this regime might be applied in practice. As discussed above, cellphone service in Boston was unavailable following two explosions at the finish line of the 2013 Boston Marathon.²⁰⁴ Initial reports, which posited that the government had shut down cellular service to forestall the potential detonation of additional explosives via cellphone, were incorrect.²⁰⁵ But would such a shutdown violate the First Amendment? Under the test proposed by this Article, the answer would likely be no, because the shutdown would be a content-neutral interference with speech, taken to further a substantial and immediate government interest in public safety, and presumably would be lifted as soon as the state of emergency had passed so as to limit any interference with either private networks or Boston's own municipal WiFi networks, which are peppered throughout the city.²⁰⁶ But the answer is closer, and the inquiry more searching, than that which public forum doctrine would provide.

2. Smart Mobs and ICT-Enabled Violence

As previously mentioned,²⁰⁷ governments must reckon with the fact that mobile communications can empower not only what we might normatively consider beneficial collective action, but also multiparty violence and other indisputably harmful conduct. Indeed, there is no principled reason to conclude that ICT enables the former but not the latter. Recent political science research shows that better cellphone service coverage in Africa increases the probability of organized violence in those areas.²⁰⁸ Governments there have responded in kind by, for example, shutting down communications networks in insurgent areas.²⁰⁹ The mob is getting smarter, and governments are responding

²⁰³ Id.

²⁰⁴ See supra notes 47–48 and accompanying text.

²⁰⁵ See supra note 48 and accompanying text.

²⁰⁶ See Ionut Arghire, After Municipal Wi-Fi Network Fail, Boston Settles for Hotspot Patchwork (Apr. 19, 2008), http://news.softpedia.com/news/After-Municipal-Wi-Fi-Network-Fail-Boston-Settles-For-Hotspot-Patchwork-83845.shtml.

²⁰⁷ See supra Part I.

²⁰⁸ Jan H. Pierksalla & Florian M. Hollenbach, *Technology and Collective Action: The Effect of Cell Phone Coverage on Political Violence in Africa*, 107 AM. POLITICAL SCI. REV. 207, 208–11 (2013).

²⁰⁹ See Tim Cocks & Lanre Ola, Nigeria Bans Satellite Phones in Islamist Battleground, REUTERS (June 19, 2013), http://www.reuters.com/article/2013/06/19/nigeria-violenceidUSL5N0EV27A20130619; Andrea Peterson, Sudan Loses Internet Access—and it Looks like

accordingly. Again, however, reliable First Amendment rules, particularly the doctrine of incitement, can address these issues.

Barring or punishing speech on incitement grounds, as set out in Brandenburg v. Ohio, requires that not only the speaker have intended the speech to cause imminent lawless action, but also that the speech be likely to do so.²¹⁰ This alone may provide a significant speechprotective barrier to State interference with **ICT**-enabled communications. An unspoken predicate for a finding of imminent incitement has traditionally been a shared physical space between speaker and audience-that is, a speaker "preparing a group for violent action and steering it to such action."211 Given incitement's imminence requirement, can a text or tweet sent to a diffuse group of receivers move a group to near-immediate action in the same manner as a speaker with a bullhorn standing before an angry assembled mob? Can "listeners" who have *read* an alleged call to lawless action rather than heard it contemporaneously be deemed to have taken the speaker's intent on as their own, in effect becoming the speaker's agents, once they act upon that intent?²¹² Or does the act of reading connote a longer moment of reflection upon deciding whether to follow a speaker's call to action, such that the read message's author cannot constitutionally be held liable for the inciting reader's act?

Though a handful of cases consider the distinction between written and spoken speech in the imminence context,²¹³ courts are only now

²¹² A related, and also relevant, distinction is the one between public and private speech in assessing whether a threat is protected by the First Amendment:

the Government is Behind it, WASH. POST (Sept. 25, 2013), http://www.washingtonpost .com/blogs/the-switch/wp/2013/09/25/sudan-loses-internet-access-and-it-looks-like-the-government-is-behind-it/.

²¹⁰ Brandenburg v. Ohio, 395 U.S. 444, 447 (1969).

²¹¹ Noto v. United States, 367 U.S. 290, 298 (1961); Herceg v. Hustler Magazine, Inc., 814 F.2d 1017, 1023 (5th Cir. 1987) ("An opinion that corn-dealers are starvers of the poor . . . ought to be unmolested when simply circulated through the press, but may justly incur punishment when delivered orally to an excited mob assembled before the house of a corn-dealer.") (quoting JOHN STUART MILL, ON LIBERTY 121 (1859, 2003 ed.)); *cf.* State v. Fratzke, 446 N.W.2d 781, 785 (Iowa 1989) (threatening letter not fighting words because words were "contained in a letter—a mode of expression far removed from a heated, face-to-face exchange").

[[]I]n deciding whether the coercive speech is protected, it makes a big difference whether it is contained in a private communication—a face-to-face confrontation, a telephone call, a dead fish wrapped in newspaper—or is made during the course of public discourse.... Coercive speech that is part of public discourse enjoys far greater protection than identical speech made in a purely private context.

Planned Parenthood the Columbia/Williamette, Inc. v. Am. Coal. of Life Activists, 290 F.3d 1058, 1099 (9th Cir. 2002) (en banc) (Kozinski, J., dissenting). *See also id.* at 1106 (Berzon, J., dissenting) ("If there is adequate time for [a] person to reflect [on a "statement encouraging or advocating that someone else" commit "violence or other illegal action"], any harm will be due to [that person's] considered act. The speech itself, in that circumstance, does not create the injury").

²¹³ Compare Herceg, 814 F.2d at 1023 (questioning but not deciding "[w]hether written material might ever be found to create culpable incitement unprotected by the first amendment"), *with* Rice v. Paladin Enter., Inc., 128 F.3d 233, 255–57 (4th Cir. 1997), *and* Citizen Publ'g Co. v.

beginning to face these issues with respect to speech distributed via ICT. For example, in the 2009 case U.S. v. Fullmer, the Third Circuit found that an animal liberation group could be prosecuted for posts on its website that coordinated electronic civil disobedience and disseminated the personal information of individuals working for a lab that tested on animals.²¹⁴ The group's site "included links to the tools necessary to carry out virtual sit-ins" to be held at a "specified time," and the group "posted ongoing updates as virtual sit-ins progressed, noting that their efforts were having the desired effect"; the group's speech thus "encouraged and compelled an imminent, unlawful act that was not only likely to occur, but provided the schedule by which the unlawful act was to occur."215 The speech was therefore unprotected under Brandenburg. However, the court's actual imminence analysis was more rigorous than those bare statements would imply. For example, in rejecting the government's argument that posting a list of previously used "terror tactics" to the site incited unlawful conduct by the group's followers, the court found that the posting of the list and the unlawful conduct in question "occurred a minimum of three weeks apart, which does not meet the 'imminence' required by the Brandenburg standard."216 The court also found that an email to the group's followers calling for a session of the aforementioned electronic civil disobedience to take place the following day was imminent.²¹⁷ Finding twenty-four hours to be sufficiently imminent is certainly a constitutionally problematic expansion of that term's definition.²¹⁸ But the Fullmer court's analysis confirmed that regardless of the form speech takes, inciting speech could be punished so long as the imminence and likelihood requirements are met. And to the extent the court's decision relied on actual lawless conduct occurring, such analysis is more speech protective than speculation as to the likelihood of such conduct.

Another recent example of how courts have addressed online incitement involved an activist named Elliot Madison who, in 2009, tweeted police movements, culled from police scanners and maps, to

²¹⁶ *Fullmer*, 584 F.3d at 155 n.10.

Miller, 115 P.3d 107, 113 (Ariz. 2005) (statement not "likely to produce imminent lawless action" because it "was made in a letter to the editor, not before an angry mob").

²¹⁴ United States v. Fullmer, 584 F.3d 132 (3d Cir. 2009).

 $^{^{215}}$ *Id.* at 155–56 (finding related speech on the site to be unprotected true threats); *cf.* United States v. Turner, 720 F.3d 411 (7th Cir. 2013) (speech on website expressing desire for judges to be murdered unprotected as true threat).

²¹⁷ *Id.* at 141, 155. The court's decision to measure imminence at the point at which the speech was *posted* to the site, rather than when it was accessed by the illegal actors alleged as likely to have been incited, is also an important potential limitation on digital speech liability.

²¹⁸ *Cf.* State v. Melchert-Dinkel, 816 N.W.2d 703, 718–19 (Minn. Ct. App. 2012) (noting that the term "imminent" describes an event that is not necessarily immediate, but "looming, at hand, approaching, expectant").

protestors during the G-20 Summit in Pittsburgh; Madison was arrested and his property seized for alleged violations of the Federal Anti-Riot statute, which criminalizes either "inciting" or "aiding and abetting" a riot.²¹⁹ Madison has not yet been prosecuted, and it is likely any eventual formal criminal charges filed will rely on the "aiding and abetting" provision of the statute rather than its "inciting" provision, given that Madison's conduct cannot be found to have propelled protesters who were already demonstrating into lawless action. In either case, Margot E. Kaminski has pointed out a number of "attenuation problem[s]" with incitement-to-riot statutes, and Brandenburg's requirements, which might bar prosecuting speakers under those statutes "because the speaker's speech and intent are several steps removed from any" actual physical harm by a mob.²²⁰ The possible punishment of a speaker for digital speech on incitement grounds presents a similar attenuation problem for the State. At least in theory, ICT-enabled speech's eradication of the shared-space requirement for speech should make it more difficult to find that the speech in question was intended to incite imminent lawless action. And in Fullmer, the speech in question was directed at the organization's followers, whether through its website or an email; thus, more general uses of ICT for speech, such as statements distributed via Twitter or Facebook, would be more difficult bases for incitement prosecutions.

Accordingly, a government in most cases will run afoul of the First Amendment if it *blocks* a message over a network based on the State's predicted likelihood that the speech, if delivered, would incite an illegal breach of the peace. As the *Fullmer* Court's analysis shows, imminence is a highly fact-based inquiry that involves consideration of the likely and intended effects of a speaker's speech. A State could not make these determinations before the speech reached its intended audience, because the best proof of incitement to imminent lawless action is the action itself occurring soon after the inciting speech. But the question whether a digital speaker could be punished *after* the advocated-for violence or other disorder had actually occurred, or was likely to occur, seems like a straightforward imminence question that courts are currently equipped to answer.

²¹⁹ See Colin Moynihan, Arrest Puts Focus on Protesters' Texting, N.Y. TIMES (Oct. 5, 2009), http://www.nytimes.com/2009/10/05/nyregion/05txt.html; Kevin Bankston, Man Arrested for Twittering Goes to Court, EFF Has the Documents, ELECTRONIC FRONTIER FOUND. (Oct. 5, 2009), https://www.eff.org/deeplinks/2009/10/man-arrested-twittering-goes-court-eff-hasdocumen; 18 U.S.C. § 2101 (1996); see also in re Application of Madison, 687 F.Supp.2d 103 (E.D.N.Y. 2009) (challenging seizure on Fourth Amendment grounds).

²²⁰ Margot E. Kaminski, *Incitement to Riot in the Age of Flash Mobs*, 81 U. CIN. L. REV. 1, 14 (2012).

E. Nondiscrimination Principles in Practice

The last four Sections argue that the State should follow nondiscrimination principles in its management and maintenance of the ICT networks it provides to citizens. Here, I develop the scope of those obligations in more detail.

To use Thomas Nachbar's helpful framework, State-run communications networks should be user-neutral, in that the network should provide continuous service to any user seeking to connect to it. The network should also be use-neutral, in that the network should generally not bar devices or applications of any type from being used on it, except for those that might credibly threaten network stability.²²¹ In the case of user-based discrimination, the rule should be the same as that which currently governs in conventional public speech spaces: any punishment for disseminating or accessing illegal or otherwise unprotected speech over the State's network must occur ex post rather than via preemptive denials of access, that is, by disconnection or denial of transmission prior to delivery. Granting the government the blanket authority to block or filter even constitutionally unprotected contentsuch as obscene websites or copyright-infringing file transfers—would necessarily grant the corresponding authority to discern the content of the message the user is transmitting or the website the user is seeking to access, which would implicate common carriage nondiscrimination principles and chill First Amendment rights.²²²

To be sure, user-based discrimination by the State would seem to implicate the First Amendment more than use-based discrimination. Barring a user from speaking is on its face a greater constitutional harm than barring the method by which she chooses to speak, and the latter restriction initially sounds more in content neutrality than a prior

²²¹ Nachbar, *supra* note 120, at 127–28.

²²² Consistent with our constitutional tradition, this proposed approach is naturally more permissive than those taken in other countries. *See, e.g.*, Robert Winnett, *WiFi Porn in Public Areas To Be Blocked*, TELEGRAPH (Apr. 23, 2013), http://www.telegraph.co.uk /news/politics/10013914/WiFi-porn-in-public-areas-to-be-blocked.html; Daniel Martin, *Porn Set To Be Banned From Public Wi-Fi This Year To Protect Children*, DAILY MAIL (May 3, 2013), http://www.dailymail.co.uk/news/article-2319149/Porn-set-banned-public-wi-fi-year-protect-children.html. On the other hand, measures to prevent minors from obtaining access to obscene

children.html. On the other hand, measures to prevent minors from obtaining access to obscene material on State networks might pass constitutional muster assuming those measures were narrowly tailored. For example, closely targeted filtering software applied at network access points where minors are likely to be accessing the network, such as parks, might pass this test. Under *American Library Association*, conditioning the receipt of State funds on the adoption of such measures would also be constitutional. *See, e.g., Children and the Internet: Laws Relating to Filtering, Blocking, and Usage Policies in Schools and Libraries*, NAT'L CONF. OF STATE LEGISLATURES (Sept. 12, 2013), http://www.ncsl.org/issues-research/telecom/state-internet-filtering-laws.aspx. In addition, even in the United States, governments may make illegal the transmission of obscene content via State-provided communications channels and punish violators of those laws without offending the First Amendment. *See* Roth v. United States, 354 U.S. 476 (1957); Ginzburg v. United States, 383 U.S. 463 (1966). None of the arguments made here challenge that *ex post* authority.

restraint. Blocking a particular instant messaging system or piece of social media software on a State ICT network is analogous to a megaphone or leafleting ban in a public park—in theory, the speaker remains free to use alternative means, in the form of other accessible applications such as email or other privately owned cellular networks where the speaker's desired use would not be proscribed, to express her message.²²³ But the availability of alternative means of communication carries no analytical force in the prior restraint context as compared to other areas of First Amendment doctrine-including forum analysis.²²⁴ As the Supreme Court has held, "[e]ven if a privately owned forum [is] available" for a speaker who is barred from using State facilities, "that fact alone would not justify an otherwise impermissible prior restraint," because "[o]ne is not to have the exercise of his liberty of expression in appropriate places abridged on the plea that it may be exercised in some other place."225 If a use is barred because of the content that might be carried over it (which, as demonstrated, is as a practical matter usually the case), alternative means availability cannot save the government's blocking from constitutional scrutiny. Simply put, "[t]he fact that speech can occur elsewhere cannot justify a content-based restriction."226

In addition, previous shutdowns and software-based restrictions demonstrate that the distinction between use-based and user-based discrimination in the ICT context is, in application, a highly permeable one. Bans on particular websites or email applications, for example, could be characterized as use-based as well as user-based.²²⁷ As demonstrated *supra*, barring certain messages based on their content can be accomplished by blocking the mode of speech as well as the speaker. The efficiency with which States can bar speech *ex ante* via use-related

²²³ Kovacs v. Cooper, 336 U.S. 77, 81 (1949). Some network traffic, such as online streaming or large-file downloading, could theoretically be blocked or deprioritized for bandwidth management reasons, on the ground that such discrimination is, at least *prima facie*, not content-based. Consistent with a use-based nondiscrimination principle, however, such a regime should be based on bandwidth usage, not by barring the use of certain applications that are often dedicated to those uses. *Cf.* Tim Wu, *Network Neutrality, Broadband Discrimination*, 2 J. ON TELECOMM. & HIGH TECH. L. 141, 168 (2003) ("[A] carrier concerned about bandwidth consumption would need to invest in policing bandwidth usage, not blocking individual applications.").

²²⁴ See, e.g., City of Renton v. Playtime Theatres, 475 U.S. 41, 46 (1986) (holding the government can impose content-neutral regulations in traditional or designated public fora if, *inter alia*, alternative avenues of communication are left open).

²²⁵ Se. Promotions, Ltd. v. Conrad, 420 U.S. 546, 556 (1975) (quoting Schneider v. State, 308 U.S. 147, 163 (1939)).

²²⁶ Denver Area Educ. Telecomm. Consortium v. Fed. Commc'ns Comm'n, 518 U.S. 727, 809 (1996) (Kennedy, J., concurring in part, concurring in the judgment in part, and dissenting in part) (citing *Conrad*, 420 U.S. at 556; Schneider v. State (Town of Irvington), 308 U.S. 147, 163 (1939)).

²²⁷ See, e.g., Turkey Seeks to Tighten Control Over Twitter, BBC NEWS (June 27, 2013, 6:34 ET), http://www.bbc.co.uk/news/technology-23079607.

interferences will prove too tempting to permit use-based discrimination.

are important policy-based reasons There for a usenondiscrimination regime as well. Numerous scholars have argued that a network open to any and all applications promotes incentives for third parties to develop new software.²²⁸ These innovations can have particular resonance in the present context, especially regarding applications designed to facilitate citizen-State interaction. As part of States' adoption of open data principles, a burgeoning "hack the government" movement is emerging in the United States, United Kingdom, and elsewhere, as developers and designers use their formidable talents to merge existing government data with new software applications for mobile devices.²²⁹ These efforts have resulted in more efficient 311-related citizen reporting systems concerning maintenance requests, utility outages, traffic updates, and the like.²³⁰ Use-based restrictions that bias newer applications might frustrate this development, inhibiting the use and improvement of e-government apps operating on State-provided networks, and disadvantaging citizens accessing the Internet in public space.

Two caveats, one for each discrimination principle set out above, are appropriate. Both involve treatment of the State's technical network management decisions as time, place, and manner restrictions that have only an incidental burden on user speech. Prioritization of traffic, in which a service provider decides whether to favor the delivery of one user's traffic over another, is a hotly contested topic in the debate over net neutrality.²³¹ On State-provided networks, however, prioritization for one particular type of user, namely priority for public safety communications traffic in the event of emergencies, seems noncontroversial. As discussed *supra*,²³² the government's ability to

²³² See supra Section IV.D.

²²⁸ VAN SCHEWICK, *supra* note 140, at 294–301.

²²⁹ See, e.g., Chantal Tode, Federal Government Boosts Digital Strategy With Mobile Apps, Security Programs, MOBILE MARKETER (May 29, 2013), http://www.mobilemarketer .com/cms/news/content/15449.html; About, REWIRED STATE, http://rewiredstate.org/about (last visited Oct. 6, 2013); see also Apps for Communities, CHALLENGEPOST, http:// appsforcommunities.challenge.gov/ (last visited Oct. 6, 2013); APPS FOR DEMOCRACY, http://www.appsfordemocracy.org/ (last visited Oct. 6, 2013) (design contests for local government mobile apps); Lauren Katims Nadeau, Citizen-to-Government Feedback at Heart of New Mobile App, GOVTECH.COM (Nov. 8, 2010), http://www.govtech.com/e-government/citizento-government-feedback-youtown-mobile-app.html.

²³⁰ See, e.g., Jeremy Mercker, A Primer on Local Government Mobile Apps, SOPHICITY (May 18, 2010), http://sophicity.com/ResourcesArticles.aspx?CNID=532.

²³¹ See, e.g., Christopher S. Yoo, *Network Neutrality and the Need for a Technological Turn in Internet Scholarship, in* ROUTLEDGE HANDBOOK OF MEDIA LAW 539 (Monroe E. Price, Stefaan G. Verhulst & Libby Morgan eds., 2013) ("Unfamiliarity with the Internet's architecture has allowed some advocates to characterize prioritization of network traffic as an aberration, when in fact it is a central feature designed into the network since its inception."), *available at* http://ssrn.com/abstract=2063994.

preempt citizen traffic for its own in those rare situations where the welfare of the public is at actual risk would cause little harm to the First Amendment, since such network management would be found contentneutral.²³³ However, governments should be mindful that prioritizing their own traffic would inevitably block the communications of other network users during crises-periods when those users would most need to communicate via ICT.234 And as to use-based discrimination, the State, like any network provider, must be able to identify and block malicious applications or content intended to interfere with the network or users' access to it. Again here, the inquiry into whether the restriction is content-based or content-neutral, applied with appropriate scrutiny through judicial review of the State's use-based discriminatory action, should offer sufficient breathing space for constitutional speech.235 Giving the State the ability to manage its network without exposing itself to Section 1983 liability for every management decision will help ensure that governments, when considering the risks and benefits of providing ICT to their citizens, will not decline to offer ICT at all.

Federal commandeering of commercial, state, and local ICT networks, as discussed above,²³⁶ presents a different issue, but one that can be resolved similarly. Again, the inquiry into whether an interference is content-based or content-neutral would supply the proper standard of review for analyzing the federal government's interference with a networked speech space, whether that space was publicly or privately owned. So, for example, if a federal agency exercises emergency authority to choke or block network traffic because that traffic might be carrying the seeds of a cybersecurity attack, the action would likely be permissible, so long as the agency acts reasonably in its assessment of the threat and narrowly tailors the action taken to prevent it. But content-based interferences, even if taken in the name of public

236 See Part II.B.

²³³ See Reicher, supra note 11, at 739–41 (distinguishing between network discrimination that is a "technical necessity" and discrimination that is not).

²³⁴ Yoo, *supra* note 231, at 545–46. Though the network management decision there was contentbased, the BART example is instructive here: users who would need to call family members or others to let them know the trains would be running late because of protests in the subway would be unable to do so, since BART had shut down its cell service repeaters to frustrate those same protests. See id.

²³⁵ In order for the First Amendment's protections to have meaning, applicable nondiscrimination principles should also require transparency in any blocking decisions. In particular, the blocking government entity should provide notice to users that applications or content they seek to distribute or access over the State's network have been blocked. Cf. NUNZIATO, supra note 12, at 144-45 (arguing for a transparency requirement for private network providers). Without a transparency obligation, the "regulation behind the screen" problem discussed above will frustrate judicial review of alleged content-based interferences with speech over the network. See supra notes 47-49 and accompanying text; see also NUNZIATO. supra note 12, at 145 (without a transparency requirement, "it is quite difficult if not impossible for users to discern whether content or applications have been blocked").

safety or analogous government interests, would be more rigorously reviewed as to motivation and means taken.

F. Rights to Speech Carriage vs. Terms of Service

Thorny issues arise when constitutional law and contract law interact. Like any network service provider, municipalities place termsof-use-based obligations on users as a condition of access to their networks; these terms nearly always include a user waiver of potential liability for any disconnection or other denials of access. The city of Raleigh, North Carolina's terms of use for its downtown WiFi network are typical, containing a blanket waiver for a service interference of any sort:

Under no circumstances shall the City, its officers, employees, or agents be liable for any direct, indirect, incidental, special, punitive or consequential or other damages that arise or result in any way from use of, or inability to use, the service to or access to the Internet or any part thereof, or user's reliance on, or use of, information, services, or merchandise provided on or deletion of files, errors, defects, delays in operation, or transmission, or any defect in or failure of performance.²³⁷

Demanding that a user waive the right to sue the government in the event of a content or viewpoint-based disconnection or other reduction in service implicates the unconstitutional conditions doctrine, under which the State may not condition receipt of a benefit on the waiver of a constitutionally protected right.²³⁸ In other words, if the State must carry the traffic of any willing user on its network as a First Amendment matter subject to certain narrow content and viewpoint-neutral exceptions, it cannot then ask prospective users to waive that right as a condition of carriage, because the unconstitutional conditions doctrine "prevents the government from asking the individual to surrender by agreement rights that the government could not take by direct action."²³⁹

²³⁷ City of Raleigh, North Carolina, *Downtown Raleigh Free WiFi Access Terms and Conditions* (on file with author); *see also, e.g., City of Miami Beach: WiFi Miami Beach—Network Terms and Conditions*, MIAMI BEACH, http://web.miamibeachfl.gov/wifi/scroll.aspx?id=53292 (last visited Oct. 6, 2013) ("As a subscriber, your access to the Service is completely at the discretion of the City, and your access to the Service may be blocked, suspended, or terminated at any time, at the sole discretion of the City, without cause or for any reason including, but not limited to, any violation of this Agreement, actions that may lead to liability for the City, disruption of access to other Users or networks, and violation of applicable laws or regulations... Service is subject to unavailability, including emergencies, third party service failures, transmission, equipment or network problems or limitations, interference, lack of signal strength, and maintenance and repair, and may be interrupted, refused, limited, or curtailed at any time.").

²³⁸ Frost & Frost Trucking Co. v. Railroad Comm'n of State of Cal., 271 U.S. 583, 594 (1926).
²³⁹ Richard A. Epstein, *Unconstitutional Conditions, State Power, and the Limits of Consent*, 102 HARV. L. REV. 4, 7 (1988). Again, it is not a response to claim that no violation has occurred because the blocked user is free to speak via a different privately owned network, because

By demanding waiver of suit for *any* disconnection as a prerequisite of speech, these terms of service provisions condition a government benefit "upon acceptance of prior restraint."²⁴⁰ The better, and constitutionally wiser, course would be for any waiver from suit in the State's terms of use to be limited to those content-neutral, nondiscriminatory disconnections associated with network management and maintenance that this Article deems are presumptively permissible.

Finally, and looping back to the beginning of this Part, the consistent use of terms of service in the digital speech space also provides an additional argument for refraining from the application of forum doctrine to that space: forum doctrine's "general access" principle provides that if a citizen must "obtain permission" from the government to use State property for speech, then that property has not been designated a public forum,²⁴¹ in contrast to property the government grants speakers access to "as a matter of course."²⁴² To the extent that the government grants permission to use its network in return for the user agreeing to its terms and conditions for use-a straightforward conclusion, given the terms used in those agreements²⁴³—the State's case that it has not designated a public form by providing an ICT-enabled network is an easy one to make. As Justice Blackmun predicted, once the State denies a prospective user access, the public forum question has been conclusively decided in the government's favor. Here again, application of forum doctrine would lead to underprotection of speech in the digital space.

CONCLUSION

Prior to the development of the public forum doctrine, the State's bundle of property rights was understood to include the right to exclude a speaker from its parks for any reason it saw fit. In the 1897 case, *Davis v. Commonwealth of Massachusetts*, the petitioner, Davis, who

alternative means availability does not cure the imposition of a prior restraint. *See supra* text accompanying notes 221–223. This rule also distinguishes the set of facts discussed here from the government-subsidized speech cases, which generally hold that conditioning receipt of government funds on viewpoint-based limitations on the use of those funds are constitutionally permissible because the speaker is free to circumvent the limitation by abstaining from using the conditioned funds to speak. *See, e.g.*, Rust v. Sullivan, 500 U.S. 173 (1991); Nat'l Endowment for the Arts v. Finley, 524 U.S. 569 (1998).

²⁴⁰ Epstein, *supra* note 239, at 7.

²⁴¹ Cornelius v. NAACP, 473 U.S. 788, 804 (1985).

²⁴² Entm't Software Ass'n v. Chi. Transit Auth., 696 F. Supp. 2d 934, 943 (N.D. Ill. 2010).

²⁴³ In other words, the State argues that agreement to the terms of use is consideration in exchange for permission to access its network, and therefore access is granted selectively and not generally. *See* Robert A. Hillman & Maureen A. O'Rourke, *Rethinking Consideration in the Electronic Age*, 61 HASTINGS L.J. 311, 328 (2009) ("Terms of use . . . constitute consideration under general contract law if at least part of the vendor's motive (however insubstantial), judged objectively, is to extract agreement to the terms of use."); Mark A. Lemley, *Terms of Use*, 91 MINN. L. REV. 459, 466 (2006) ("[T]he user has 'signed' the contract by clicking 'I agree'").

was preaching in Boston Common, was arrested under an ordinance that made doing so without a permit from the mayor illegal.²⁴⁴ Davis argued that Boston Common was "the property of the inhabitants of the city of Boston, and dedicated to the use of the people of that city and the public in many ways; and the preaching of the gospel there has been, from time immemorial to a recent period, one of these ways."245 The Supreme Court, in a unanimous opinion, disagreed. The Court upheld the lower court's finding, and in a opinion written by Justice Holmes, of all people, emphasized that "[f]or the legislature to absolutely or conditionally to forbid public speaking in a highway or public park is no more an infringement of the rights of a member of the public than for the owner of a private house to forbid it in his house."246 Hague and the subsequently decided public forum cases expressly rejected the strict State-as-property-owner rule set propounded Davis.247 But ironically, applying the public forum doctrine in the digital speech context circles right back to the 115-year-old result in Davis-the State can shut down its network because it owns it.

Almost ten years ago, Jack Balkin argued that ICT-enabled technologies required us to reorient our First Amendment perspectives, "not because digital technologies fundamentally change what freedom of speech is," but rather because they change "the social conditions in which people speak, and by changing the social conditions of the speech, they bring to light features of freedom of speech that have always existed in the background but now become foregrounded."²⁴⁸ Space and time, aspects of speech that were essential, if not determinative, to First Amendment protection under the public forum doctrine, have been revealed by ICT as incidental. However, despite the passing of a decade since Balkin proffered this argument, we have come no closer to changing our conceptions of how and why digital speech matters to the law.

Ironically enough, one reason we have failed to do so is because of a false equivalence that affords too much emancipatory potential to ICT-enabled speech. ICT has freed us from temporality and space. But Twitter is not *samizdat*,²⁴⁹ nor can it be. In the ICT space, the freedom of information depends on the design and operation of network

²⁴⁴ Davis v. Massachusetts, 167 U.S. 43, 46 (1897).

²⁴⁵ Davis, 167 U.S. at 46 (quoting Brief of Counsel for Plaintiff in Error, Commonwealth v. Davis, 162 Mass. 510 (Mass. 1895)).

²⁴⁶ Id. at 47.

²⁴⁷ See supra Part III.A.

²⁴⁸ Balkin, *supra* note 21, at 2.

²⁴⁹ Samizdat was the dissident publication system whereby materials were reproduced and distributed by hand during the Soviet period to evade the State's censorship controls. *See generally* SAMIZDAT, TAMIZDAT, AND BEYOND: TRANSNATIONAL MEDIA DURING AND AFTER SOCIALISM (Friederike Kind-Kovacs & Jessie Labov eds., 2013).

protocols and interfaces. And to the extent that design or operation is amenable to state interference, it cannot follow that information networks will, as a matter of course, enable or produce political destabilization.²⁵⁰ One step in the right direction is for First Amendment law to treat State-provided communications spaces as what they are networks, and to treat ICT-enabled speech as what *it* is—traffic. By thinking about the Internet as a set of networks, protocols, and technologies instead of as a speech space in the tradition of a public square or town hall, we will protect more speech than we do now.

 $^{^{250}}$ See Julie E. Cohen, Configuring the Networked Self: Law, Code, and the Play of Everyday Practice 13 (2012).