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FROM THE EDITOR

This issue marks our second contribution to the field of telecommunications and high technology law. The implosion of the stock market over the past few years and the current poor outlook might turn the casual observer in a different scholarly direction. There has never been a better time, however, to enter the realm of telecommunications or high technology law. The dynamic market conditions and tenuous regulatory structure provide ample opportunity to delve into the field.

This issue, by matching the high quality of our first, demonstrates the potential for cutting-edge work in this field. Moreover, it demonstrates that the Journal on Telecommunications & High Technology Law can be counted on to publish such pieces. The articles herein reflect an enormous amount of critical thinking, and provide unique solutions to the myriad of dilemmas facing practioners and scholars in the field. Because of the fast pace of technological change in this area, there are numerous opportunities for commentators to formulate innovative regulatory frameworks. Our challenge is to "keep up" with the brisk pace of change, and to provide a forum for the most distinguished and intriguing commentators to offer their insight into telecommunications and high technology law.

I would be remiss if I did not mention and thank all of the individuals who assisted both in the production of the issue, and the sustained vitality of the Journal. First, the journal would not exist were it the incredible support of the Silicon not for Flatirons Telecommunications Program. Led by Professor Phil Weiser, whose own contribution is immeasurable, Silicon Flatirons provides the Journal with a solid ground upon which to grow. Our undying gratitude to Professor Weiser, for both personal and professional guidance cannot be expressed, but is a tacit bond each member of our board has with him. I also want to mention the former members of the Journal who laid the foundation for continuing this exciting enterprise.

Next, I'd like to express gratitude to the members of our current board. Special thanks go to Craig Hein, our Managing Editor, without whose help, we would have never been able to get this issue published. I'd also like to thank our article editors who worked diligently all summer offering nary a complaint. The second year students who provided

J. ON TELECOMM. & HIGH TECH. L.

incredible assistance on the articles throughout the summer also deserve mention, as do our Production Editors, Lorin Dytell and Karl Dierenbach, who stepped up at the eleventh hour to put these articles into publishable form. The authors deserve particular credit for dealing with a fledgling journal, and a new board. Their patience and understanding made the publishing process all the more enjoyable and trouble-free.

We are proud to offer our readers the second installment of the Journal on Telecommunications & High Technology Law, and encouragingly look forward to the continued success of the Journal.

Evan Rothstein Editor-In-Chief

JOURNAL ON TELECOMMUNICATIONS & HIGH TECHNOLOGY LAW

Volume 2

Fall 2003

CONTENTS

REGULATORY CHALLENGES AND MODELS OF REGULATION <i>Philip J. Weiser</i>
CENSORSHIP, COPYRIGHT, AND FREE SPEECH: SOME TENTATIVE SKEPTICISM ABOUT THE CAMPAIGN TO IMPOSE FIRST AMENDMENT RESTRICTIONS ON COPYRIGHT LAW <i>Christopher L. Eisgruber</i>
JUDICIAL REVIEW AND THE QUEST TO KEEP COPYRIGHT PURE <i>Thomas B. Nachbar</i>
CODE VERSUS THE COMMON LAW Stacey L. Dogan
THE POTENTIAL RELEVANCE TO THE UNITED STATES OF THE EUROPEAN UNION'S NEWLY ADOPTED REGULATORY FRAMEWORK FOR TELECOMMUNICATIONS J. Scott Marcus
NETWORK NEUTRALITY, BROADBAND DISCRIMINATION <i>Tim Wu</i> 141
OPEN COMMUNICATIONS PLATFORMS: THE PHYSICAL INFRASTRUCTURE AS THE BEDROCK OF INNOVATION AND DEMOCRATIC DISCOURSE IN THE INTERNET AGE <i>Mark Cooper</i>
FCC'S BROADBAND QUARTET: A STATE-FEDERAL FUGUE OR FEUD? <i>Rebecca Arbogast</i>
0

SUBSIDIZED RURAL TELEPHONY AND THE PUBLIC INTEREST: A CASE STUDY IN COOPERATIVE FEDERALISM AND ITS
PITFALLS <i>Jim Chen</i>
"COOPERATIVE FEDERALISM" GONE WRONG: THE IMPLEMENTATION OF THE TELECOMMUNICATIONS ACT
OF 1996 <i>Roy E. Hoffinger</i>
INCENTIVES TO SPEAK HONESTLY ABOUT INCENTIVES: THE NEED FOR STRUCTURAL REFORM OF THE LOCAL COMPETITION DEBATE
Jonathan E. Nuechterlein
YEAR 2002: THE YEAR OF THE TELECOM MELTDOWN Dale A. Oesterle413
REGULATION AND FREE MARKETS: HOW TO REGULATE THE TELECOMMUNICATIONS INDUSTRY IN THE NEW ECONOMY <i>James Crowe</i>

REGULATORY CHALLENGES AND MODELS OF REGULATION

PHILIP J. WEISER*

INTRODUCTION

This event marks the Silicon Flatiron Program's third major policy conference aimed at examining the emerging regulatory regime that will govern the telecommunications, Internet, and information technology industries.¹ These industries form the backbone of what some call "the New Economy"² and others call the "information industries."³ From a legal standpoint, these dynamic industries are regulated, in significant part, by a framework embodied in the Telecommunications Act of 1996⁴ and the Clinton Administration's 1997 statement of Internet policy found in its Global Framework for Electronic Commerce.⁵ In short, this framework encourages technological convergence, competition, and minimal public regulation of the Internet—with the notable exception of providing strong intellectual property protection.

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^{1.} For those interested in my overviews and synopses of the themes of the first two conferences, see Phil Weiser, *Paradigm Changes In Telecommunications Regulation*, 71 U. COLO. L. REV. 819 (2000) [hereinafter Weiser, *Paradigm Changes*]; Philip J. Weiser, *Law and Information Platforms*, 1 J. ON TELECOMM. & HIGH TECH. L. 1 (2002) [hereinafter Weiser, *Information Platforms*].

^{2.} See Richard A. Posner, Antitrust In The New Economy, 68 ANTITRUST L.J. 925, 925 (2001) (defining New Economy as computer software, Internet-related, and telecommunications equipment and service providers).

^{3.} This is actually my preferred term as well as its corollary, information law.

^{4.} Pub. L. No. 104-114, 110 Stat. 56 (1996) (codified in various sections of 15, 18, and 47 U.S.C.).

^{5.} See PRESIDENT'S AND VICE-PRESIDENT'S REPORT ON GLOBAL ELECTRONIC COMMERCE, A FRAMEWORK FOR GLOBAL ELECTRONIC COMMERCE, INFORMATION TECHNOLOGY MANAGEMENT WEB, at http://www.itmweb.com/essay541.htm (July 1, 1997).

This conference focuses on four possible regulatory strategies that policymakers can employ to govern the information industries. First, a federal agency, like the Federal Communications Commission (FCC) or the Federal Trade Commission (FTC), can adopt command and control regulations that govern an industry. Second, a regulatory framework can embrace a dual jurisdictional approach, where related federal and state agencies (or courts) work in partnership-under a cooperative federalism model-or with various degrees of tension. Third, a regime can rely on common law-type development by judges, as is the case with constitutional law, antitrust law, and copyright law. Finally, government can allow codes of conduct or standard setting bodies to self-regulate an industry. More often than not, policymakers and academics do not think systematically about which strategy (or strategies) to use for particular problems, leading both to legal uncertainty and inconsistency across the different areas of the law governing the information industries. Consequently, it is important that we move toward a coherent body of "information law." 6

The considerable ambiguity and legal uncertainty in this area is exactly what makes information law a fruitful area for legal academics and practicing lawyers, both of whom must strive to develop and apply old principles to fast changing markets.⁷ To provide some structure for thinking about this area, I will first outline a "layered model" for understanding the information industries. With that model on the table, I then discuss some cutting edge issues in information law and how those issues relate to the importance of thinking carefully about deploying the regulatory strategies outlined above.

^{6.} This effort would harmonize the tension that exists between the relevant legal regimes. *See, e.g.*, Philip J. Weiser, *The Imperative of Harmonization Between Antitrust and Regulation*, 698 PLI/PAT 73 (2002).

^{7.} As business persons emphasize and policymakers recognize, legal uncertainty can impede investment and the development of sound business strategies. *See, e.g., Competition Issues In The Telecommunications Industry: Before The Senate Committee on Commerce, Science, and Transportation,* 3 (Jan. 14, 2003) (statement of Kathleen Abernathy, Commissioner, F.C.C.) ("It is no exaggeration to say that a company may prefer receiving an adverse ruling to having no rules at all; in the former case, the company can adjust its business strategy and move on consistent with the regulatory parameters, while in the latter the result is often paralysis."), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-230241A3.doc. For a discussion of the strategies to reduce legal uncertainty and move more effectively to a next generation regulatory regime, see Jonathan E. Nuechterlein, *Incentives to Speak Honestly About Incentives: The Need for Structural Reform of the Local Competition Debate*, 2 J. ON TELECOMM. & HIGH TECH. L. 399 (2003).

I. THE LAYERS OF THE INFORMATION INDUSTRIES

As an analytical structure for understanding the information industries and how they are regulated, one can focus on four related "layers." Building from bottom to top, these are: the physical layer, the logical layer, the applications layer, and the content layer.⁸ I will outline each in turn, noting how they are currently regulated.

The bottom layer is the physical layer. With technological convergence, we live in a world where cable companies provide telephone service; telephone companies provide Internet access; and Internet companies carry voice calls. These developments mean that regulations focused on the physical transport layer-whether the particular medium is a cable broadband facility, a telephone line, or a wireless connectioncan be analyzed by the same competition policy framework. Any such framework will invariably focus on whether the facility is being deployed widely, whether subsidies are warranted to facilitate deployment or adoption, whether complementors and competitors to the facility are allowed appropriate access, and how access is priced (either for wholesale or retail customers). In the main, each of these questions tend to be analyzed by regulatory agencies. Increasingly, judges appreciate the technical expertise possessed by and complex policy judgments made by these agencies and realize that second-guessing their decisions is beyond their expertise.⁹ Thus, debates over institutional competence in this area more often focus on whether state or federal agencies should take the lead role rather than whether judges or regulators should be in control. In the case of the Telecommunications Act of 1996, the federal-state jurisdictional debate is very much alive, as both regulators and courts are still struggling to develop a sensible vision for allocating federal versus state authority under the Act's pro-competitive vision.¹⁰

^{8.} Kevin Werbach describes this as the four layer model of the Internet, *see* Kevin Werbach, *A Layered Model for Internet Policy*, 1 J. ON TELECOMM. & HIGH TECH. L. 37, 59-65 (2002), but it is possible to apply the model more broadly to the set of information industries which are all affected by the Internet.

^{9.} The Supreme Court acknowledged this point in Chevron U.S.A. v. Natural Resources Defense Council, which limited the scope of judicial review of agency decisions. See 467 U.S. 837 (1984); see also Philip J. Weiser, Federal Common Law, Cooperative Federalism, and the Enforcement of the Telecom Act, 76 N.Y.U. L. REV. 1692, 1715-17 (2001) [hereinafter, Weiser, Federal Common Law] (explaining significance of this aspect of Chevron). For this same basic reason, courts should also be wary about mandating overly ambitious remedies in antitrust cases. See Philip J. Weiser, Goldwasser, The Telecom Act, and Reflections on Antitrust Remedies, 55 ADMIN. L. REV. 1, 14-17 (2003) [hereinafter, Weiser, Goldwasser].

^{10.} For an example of the ongoing debate, compare BellSouth Telecommunications, Inc. v. MCImetro Access Transmission Servs., Inc., 317 F.3d 1270 (11th Cir. 2003) (en banc) with *id.* at 1285 (Tjoflat, J., dissenting). *See also* Jim Chen, *Subsidized Rural Telephony and the*

The logical layer is the least appreciated segment of the information industries, even though the basic standards that comprise it are crucial to shaping the Internet. These standards are generally developed and maintained by self-regulation, although the federal government's initial financial support during their development gave it an important regulatory role during the Internet's early days. The Transmission Control Protocol/Internet Protocol (TCP/IP), which facilitates all Internet communication, is the most significant of these standards. The current lack of direct government involvement in this area raises a series of important questions, including: how the TCP/IP standard will be upgraded to allow for more Internet addresses, how the security of the Internet's information infrastructure will be protected, and whether the Internet's open architecture will continue to adhere to the "end-to-end principle"¹¹ championed by its early pioneers. Suggesting that the Internet has come to a crossroads, some Internet policy observers argue that more government involvement is necessary to address these issues effectively.12

The applications layer represents the inventions that enable consumers to use the Internet in different ways. On this definition, the set-top box that is used for digital cable and interactive television is an application as well as an instant messaging system, a Web browser, or a media player. Depending on the nature of the application, it may be comprised of software or a combination of hardware and software. Another conception of this layer is the "digital device" layer, which mediates between the network—i.e., the combination of the physical and logical layer—and the viewing and usage of content. In general, the FCC stays out of the business of regulating applications, leaving judges—in implementing both antitrust and the intellectual property

Public Interest: A Case Study in Cooperative Federalism and Its Pitfalls, 2 J. ON TELECOMM. & HIGH TECH. L. 307 (2003); Roy E. Hoffinger, "Cooperative Federalism" Gone Wrong: The Implementation of the Telecommunications Act of 1996, 2 J. ON TELECOMM. & HIGH TECH. L. 375 (2003).

^{11.} For a cogent discussion of the "end-to-end" architecture principle, see Dale Hatfield, *Preface*, 8 COMMLAW CONSPECTUS 1, 1 (2000).

^{12.} See, e.g., Zoe Baird, Governing The Internet: Engaging Government, Business, and Nonprofits, 81 FOREIGN AFF. Nov./Dec. 2002, at 15 (arguing that "[a] reliance on markets and self-policing has failed to adequately address the important interests of Internet users" and that it is time for governments to play a role "on key Internet policy issues"). But see Charles Cooper, Do Gooders Will Wreck The Internet, CNET NEWS.COM, January 3, 2003, at http://news.com.com/2010-1071-978983.html (criticizing Baird article). Any argument for a role for government in Internet regulation is indebted to Lawrence Lessig's discussion of the issue. See generally LAWRENCE LESSIG, CODE AND OTHER LAWS OF CYBERSPACE (1999).

laws—to develop the basic rules of the road.¹³ Nonetheless, when there is a "chicken and egg" problem in coordinating the rollout of devices and network upgrades, such as in the case of digital television, the FCC sometimes gets involved in the design of network devices and applications. This intervention, however, requires the agency to set technical standards for how these applications will work and is fraught with difficulty.¹⁴

For most users of the Internet, the content layer-and the legal issues related to it—is familiar territory. As is increasingly appreciated, the digital age enables all types of content-be it music, movies, emails, or voice conversations-to be copied and spread rapidly. For the courts and Congress, the advent of digital technology and the Internet have spawned efforts to protect the rights of copyright holders as well as to protect children from pornography. In terms of protecting copyright holders, most citizens did not pay attention when Congress enacted the Digital Millennium Copyright Act (DMCA) and the Sonny Bono Copyright Term Extension Act (CTEA).¹⁵ In the wake of their enactment, a series of litigants have asked federal judges-without much success-to either interpret these enactments narrowly or invalidate them as constitutionally infirm on the ground that they unjustifiably limit the public domain and/or the fair use privilege.¹⁶ In almost the reverse of the copyright context, many citizens pushed for regulation of pornography on the Internet, but the Supreme Court has only rarely upheld the relevant statutory provisions as constitutional.¹⁷

2003]

^{13.} To date, the Microsoft litigation reflects antitrust law's most significant role in regulating the applications layer. *See* U.S. v. Microsoft Corp., 253 F.3d 34 (D.C. Cir. 2001) (holding Microsoft liable for excluding Netscape from the market), *cert. denied*, 534 U.S. 952 (2001). For a critique of the FCC's unique foray into regulating applications by imposing a regulatory regime over AOL/Time Warner's instant messaging system, see Philip J. Weiser, *Internet Governance, Standard Setting, and Self-Regulation*, 28 N. KY. L. REV. 822 (2001) [hereinafter Weiser, *Internet Governance*].

^{14.} One promising strategy for agencies to set technical standards is to develop general mandates that can be implemented by standard setting bodies. For a discussion of this approach, *see* Weiser, *Internet Governance, supra* note 13.

^{15.} See 17 U.S.C. § 1201 (2000) (DMCÅ); 112 Stat. 2827 (1998) (CTEA).

^{16.} See, e.g., Eldred v. Ashcroft, 123 S.Ct. 769 (2003) (rejecting challenge to CTEA); Universal City Studios, Inc. v. Corley, 273 F.3d 429 (2d Cir. 2001) (upholding application of DMCA).

^{17.} See Reno v. ACLU, 521 U.S. 844 (1997) (invalidating Communications Decency Act); Ashcroft v. ACLU, 535 U.S. 564 (2002) (remanding Child Online Protection Act for further scrutiny); Ashcroft v. Free Speech Coalition, 535 U.S. 234 (2002) (invalidating law regulating child pornography created with digital technology); United States v. Am. Library Ass'n, Inc., 123 S.Ct. 2297 (2003) (upholding the constitutionality of the Children's Internet Protection Act (CIPA)).

II. INFORMATION LAW CHALLENGES AND REGULATORY RESPONSES

One strategy for regulating the information industries would be to assign different regulatory models to the different layers outlined above. Under this approach, the FCC could oversee the physical layer, including the management of spectrum policy. The logical layer could remain "unregulated," with standard setting bodies, self-regulation, and free market competition governing its development. The applications layer could remain the domain of antitrust and, to a lesser degree, intellectual property law (insofar as it regulates through providing or withholding protection).¹⁸ Finally, the content layer could be subject to congressional enactments and the judicial interpretations of them, including judgments on their constitutionality. The salutary aspect of this approach would be that it might ensure that there is a tailored treatment of each layer and its unique issues. But this approach to technology policy would also unnecessarily limit regulatory flexibility and require a constant policing between the boundaries of each layer.¹⁹

The inverse model for regulating the information industries would be to apply each model of regulation identically to all layers. This redundant regulatory strategy would create a series of conflicts because common law rules, for example, need to be modified to recognize the presence of regulatory actors.²⁰ Moreover, legal doctrines such as the First Amendment standards that govern the content layer may not automatically translate to issues related to the physical layer.

Ideally, the regulatory strategy for each layer can be crafted and applied with sufficient nuance so that it is sensitive to the unique characteristics of the issues arising at each layer. This sensitivity ultimately counsels that these different strategies should be mixed and matched to address the policy issues arising at the different layers. To provide some context for this "mixing and matching" approach to regulatory strategy, I outline below the cases of spectrum, network unbundling, network neutrality, copyright, and privacy policy.

^{18.} For a discussion of how copyright law regulates applications, see Philip J. Weiser, *The Internet, Innovation, and Intellectual Property Policy*, 103 COLUM. L. REV. 534 (2003).

^{19.} The Telecom Act's strategy of regulating different technologies under different regimes, even where they provide similar services, raises exactly these sorts of issues. See John T. Nakahata, Regulating Information Platforms: The Challenge of Rewriting Communications Regulation From The Bottom Up, 1 J. ON TELECOM. & HIGH TECH. L. 95, 141 (2002) (describing current telecommunications regulatory system as "an archaic classification of communications services into regulatory pigeonholes that cannot survive").

^{20.} This theme is developed, as to the relationship of antitrust law and regulation, in Weiser, Goldwasser, *supra* note 9.

The last century of spectrum policy followed the basic agency model and control regulation contemplated by command the of Communications Act of 1934. In the late 1950s, Nobel Laureate Ronald Coase criticized this model, explaining that property rightspresumably enforced by the FCC or common law courts-could better manage the spectrum than command and control regulation.²¹ This suggestion has inspired some critical assessments of the soundness of the initial decision to rely on agency regulation of the spectrum²² as well as a number of reform proposals to move the agency towards a property rights model.²³ Moreover, in the late 1990s, some commentators suggested that technological change could facilitate the self-regulation of access to spectrum treated as common property.²⁴ Finally, some commentators have suggested that courts should mandate certain approaches to spectrum policy as required by the First Amendment.²⁵

Upon taking office as Chairman of the FCC, Michael Powell initiated a re-examination of the FCC's spectrum policy, led by Peter Tenhula and Paul Kolodzy.²⁶ This effort promises a new regulatory regime for regulating spectrum that will take seriously the arguments of those advocating for both the property rights model and "commons" approaches. Moreover, this initiative may also shift spectrum policy towards more a reactive, common law approach—whether superintended by courts or the FCC—as opposed to proactive, command and control agency regulation. Finally, to minimize interference while enabling the use of unlicensed spectrum, spectrum shared between multiple users, or spectrum owned by others, the FCC will need to set technical standards

2003]

^{21.} See Ronald Coase, The Federal Communications Commission, 2 J. L. & ECON. 1 (1959).

^{22.} See, e.g., Thomas W. Hazlett, *The Wireless Craze, the Unlimited Bandwidth Myth, the Spectrum Auction Faux Pas, and the Punchline to Ronald Coase's "Big Joke": An Essay on Airwave Allocation Policy*, 14 HARV. J.L. & TECH. 335, 366-73 (2001).

^{23.} See, e.g., Gregory L. Rosston & Jeffrey S. Steinberg, Using Market-Based Spectrum Policy to Promote the Public Interest, 50 FED. COMM. L.J. 87 (1997).

^{24.} See, e.g., Yochai Benkler, Overcoming Agoraphobia: Building the Commons of the Digitally Networked Environment, 11 HARV. J.L. & TECH. 287 (1998).

^{25.} See Stuart Minor Benjamin, The Logic of Scarcity: Idle Spectrum as a First Amendment Violation, 52 DUKE L.J. 1 (2002) (arguing that idle spectrum violates the First Amendment); Yochai Benkler & Lawrence Lessig, Net Gains: Will Technology Make CBS Unconstitutional?, THE NEW REPUBLIC, Dec. 14, 1998, at 12, 14 (arguing that broadcast regulation may violate the First Amendment if "spread-spectrum technology" enables multiple, non-interfering uses of spectrum frequencies).

^{26.} The proceedings of the FCC's Spectrum Policy Task Force can be found at http://www.fcc.gov/sptf. See also Michael K. Powell, Broadband Migration III: New Directions in Wireless Policy, Remarks at the Silicon Flatirons Telecommunications Program, University of Colorado at Boulder (Oct. 30, 2002), at http://www.fcc.gov/Speeches/Powell/2002/spmkp212.html.

that will govern such arrangements.²⁷ This effort, particularly if an ambitious one, may well lead the agency to look to outside standard setting bodies or other entities for assistance.

The Telecom Act's commitment to require the "unbundling" of the local telephone infrastructure to facilitate entry represents an ambitious experiment in industrial policy. Under any conceivable course of events, a forced sharing regime, where an incumbent monopolist would "unbundle" parts of its network for lease to its competitors, would not be easy for regulators to superintend. Unfortunately, many business persons, politicians, and citizens were not chastened by the difficulty in managing a transition to a new regulatory regime. Moreover, since the Act's passage, the FCC has yet to adopt a set of unbundling requirements that can withstand judicial scrutiny.²⁸ Finally, to make matters worse, the federal and state regulators have yet to clearly determine how to enforce the Act's unbundling requirements.²⁹

A number of papers in this conference grapple with the intricacies of unbundling policy and the difficult task that the FCC undertook in its Triennial Review, which revised the rules that govern what elements of an incumbent provider's network must be unbundled. In terms of unbundling policy, it is critically important that the FCC justify its approach to unbundling by reference to innovation policy. First, an innovation policy focus means that where innovation can be brought to the telecommunications marketplace only through the unbundling of a particular element, there is a compelling argument for unbundling that element. This analysis flows from the Act's standard for unbundling, which centers on whether access to an unbundled network element is

^{27.} See FCC Getting More Hands-On With Technical Spectrum Rules, WCA Says, COMMUNICATIONS DAILY, Jan. 15, 2003, LEXIS, Nexis, Computing & Technology File (explaining significance of interference rules). To explain a proposal to allow unlicensed devices to operate in the broadcast spectrum, one of the FCC's leading engineers commented that "[t]he FCC wants to encourage the sharing of spectrum and take advantage of it when it's not being used, as long as there is not interference . . . [but we don't want the spectrum to get] crowded to the point where it doesn't work." Richard Shim, FCC: Open Up TV Waves To Wireless, CNET NEWS.COM (Jan. 16, 2003), at http://news.com.com/2100-1033-981047.html (quoting Alan Scrime, Chief of the Policy and Rules Division in the FCC Office of Engineering and Technology).

^{28.} See, e.g., AT & T Corp. v. Iowa Utils. Bd., 525 U.S. 366, 389-90 (1999); U.S. Telecom Ass'n v. F.C.C., 290 F.3d 415, 422 (D.C. Cir. 2002) (*USTA*).

^{29.} For a discussion of the Telecom Act's enforcement regime, see Weiser, Federal Common Law, supra note 9, at 1740-1752. For a recognition of the importance of this issue, see Competition Issues in the Telecommunications Industry: Before the Senate Committee on Commerce, Science, and Transportation 12 (Jan. 14, 2003) (statement of Michael K. Powell, Chairman, F.C.C.), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/ DOC-230241A1.pdf ("Enforcement should be something carriers take seriously, and not merely a cost of doing business, and one way to do this is to make sure that [the FCC is] working together, and not at cross-purposes, with the states.").

"necessary" for a competitor and the absence of access would "impair" its ability to compete.³⁰ As the Supreme Court explained, this inquiry requires the consideration of whether competitors can obtain these elements—or reasonable substitutes for them—from a source other than the incumbent provider.³¹ Second, an innovation policy focus means that where a product is likely to be offered even without an unbundling requirement—either because the incumbent will ensure that it reaches consumers or because an alternative provider will offer it—the costs of unbundling may well outweigh its benefits.

In addition to the substantive policy questions involved in the debate, unbundling policy also raises a critically important question of regulatory strategy. In particular, the question of what network elements must be unbundled may be decided differently in different states. As appropriately recognized by the D.C. Circuit, the FCC's reasons for providing so little discretion to state agencies under its earlier rules were very unconvincing.³²

I have discussed the role of state agencies under the Act elsewhere at length,³³ so I will only comment briefly on this issue here to note the inconsistent course taken by the FCC's Triennial Review decision.³⁴ On some issues, it left the state agencies with no discretion-i.e., with respect to the provision of the unbundling of the data portion of the loop (or line-sharing, as it is often called)—thereby surrendering an important regulatory tool that the Act provides. On other issues-i.e., with respect to unbundled switching-the FCC left the state agencies with, in many cases, a totality of the circumstances inquiry that will tax their resources by asking them to make open-ended judgment calls. In short, the FCC's approach to both line sharing and unbundled switches took vastly different options to enlisting state agencies in telecommunications policy. The better model, and the path not taken in the Triennial Review decision, is for the FCC to leave room for state experimentation under a clear federal framework (i.e., that identifies plausibly sensible alternatives) and to allow states to petition for a different approach by requesting a waiver from the FCC's policy prescription.

2003]

^{30. 47} U.S.C. § 251(d)(2) (2000). For a discussion of this issue, *see* Weiser, *Paradigm Changes, supra* note 1 at 827-31; *USTA*, 290 F.3d at 418-28.

^{31.} See Iowa Utils. Bd., 525 U.S. at 389-90.

^{32.} USTA, 290 F.3d at 422-25.

^{33.} For a discussion of the nature of the Act's cooperative federalism framework, see Weiser, Federal Common Law, supra note 9, at 1740-43; Philip J. Weiser, Chevron, Cooperative Federalism, and Telecommunications Reform, 52 VAND. L. REV. 1 (1999).

^{34.} Review of the Section 251 Obligations of Incumbent Local Exchange Carriers, *Report and Order*, CC Docket No. 01-338 (Aug. 21, 2003), *available at* http://www.fcc.gov/Daily_Releases/Daily_Business/2003/db0821/FCC-03-36A1.pdf

Over the course of the next several years, a critical issue in broadband policy will be whether the owners of broadband networks are required to adhere to the open standard of the Internet protocol. As Tim Wu explains, the debate over whether Internet Service Providers (ISPs) should be assured of the ability to resell an incumbent's broadband connection does not go to the heart of concerns about maintaining the Internet's open architecture.³⁵ Thus, the critical question is not whether government policy requires multiple ISP access to cable, telephony, or other broadband platforms, but whether it will impose a nondiscrimination requirement on downstream content in order to preserve the Internet as an open platform for innovation. Such a regime would allow intra-network rules that restrict bandwidth usage and the like, but would view as suspicious any rules that would discriminate against some outside content or services without a legitimate business justification.³⁶

To justify a governmental non-discrimination mandate with respect to broadband platforms, the FCC faces two basic challenges. First, the agency must develop a clear conceptual framework that grapples with the question of why broadband infrastructure providers would discriminate against upstream content that, as a complementary service, would make their platform more valuable.³⁷ Without such a showing, a reviewing court will, almost certainly, remand the issue back to the FCC for a more careful evaluation.³⁸ Second, the FCC must evaluate whether the proposed remedy is indeed likely to address the competitive harm it is concerned about and whether, accounting for administrative and error costs, the prescribed remedy will do more good than harm.

If the FCC is able to craft a minimally intrusive and easily implemented regime to ensure broadband network neutrality, it might succeed in mirroring what most providers would do anyway and also build in a potentially important insurance policy against discriminatory behavior. In making this judgment, the FCC must consider whether the marketplace incentives towards openness and the influence of standard setting bodies would—without any FCC action—maintain the Internet

^{35.} For a clear explanation of this point, see Tim Wu, Network Neutrality, Broadband Discrimination, 2 J. ON TELECOM. & HIGH TECH. L. 141, 147-49 (2003); see also James Speta, A Common Carrier Approach To Internet Interconnection, 54 FED. COMM. L. J. 225 (2002).

^{36.} Wu, *supra* note 35, at 165-70; *see also* Philip J. Weiser, *Toward A Next Generation Regulatory Regime*, 49 LOY. L. REV. (forthcoming 2003).

^{37.} This issue is taken up in Joseph Farrell & Philip J. Weiser, *Modularity, Vertical Integration, and Open Access Policies: Towards a Convergence of Antitrust and Regulation In The Internet Age*, 17 HARV. J.L. & TECH. (forthcoming 2003), *available at* http://repositories.cdlib.org/iber/cpc/CPC02-035 (last visited Sept. 24, 2003).

^{38.} *See, e.g., USTA*, 290 F.3d at 422 (overruling, for lack of a reasoned justification, the FCC's rules on local telephone network unbundling).

as an open platform. If the FCC addresses this issue effectively in its broadband rulemakings, it may well adopt rules that are as enduring and important as the Computer Inquiry rules that they appear ready to modify (or replace entirely).³⁹

Copyright policy provides an illustrative example of how the common law model of regulation can work. Like antitrust rules, the history of copyright policy largely reflects a reliance on judge made rules through common law adjudication.⁴⁰ After new technologies, such as player pianos and VCRs, were invented, the federal courts and ultimately the Supreme Court evaluated whether these inventions should be banned on the ground that they facilitated unlawful infringement.⁴¹ In rejecting these arguments, the courts allowed these technologies to develop, and ultimately left room for Congress, with the benefit of experience with the judicially devised approaches, to institute a new regulatory regime.⁴² For both copyright and antitrust policy—as well as constitutional law—it is very clear that Congress appreciates that the courts possess an impartiality that confers upon them an institutional competence for deciding certain types of questions.⁴³ Moreover, common law courts react to developments in the marketplace and decide matters as they arise; agencies, by contrast, generally adopt rules that structure the marketplace proactively. In situations involving new technologies, the common law approach provides more flexibility and thus will often be superior.

Contrasted with the historic tradition outlined above, there are two notable trends in copyright policy. First, Congress is increasingly accepting and acting on the arguments of industry related to the threats

42. In response to the *White-Smith* case, for example, Congress ultimately enacted a compulsory license regime. *See* Goldstein v. California, 412 U.S. 546, 565-66 (1973) (discussing *White-Smith* and the ensuing legislative response).

2003]

^{39.} See Farrell & Weiser, supra note 37, at 44-49 (discussing the FCC's Computer Inquiries).

^{40.} As Judge Boudin put it, "the heart of copyright doctrine—what may be protected and with what limitations and exceptions—has been developed by the courts through experience with individual cases." Lotus Dev. Corp. v. Borland Int'l, Ltd., 49 F.3d 807, 820 (1st Cir. 1995) (Boudin, J., concurring), *aff'd by an equally divided Court*, 516 U.S. 233 (1996).

^{41.} See Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417 (1984) (upholding use of VCR against copyright challenge); White-Smith Music Pub. Co. v. Apollo Co., 209 U.S. 1 (1908) (holding that piano roll recordings did not infringe copyright in musical compositions). As Stacey Dogan puts it, these decisions reflect a tradition of copyright common law cases which hold that "copyright holders should almost never have veto power over new technologies"—particularly ones that can be used for both infringing and non-infringing purposes. Stacey L. Dogan, *Code Versus The Common Law*, 2 J. ON TELECOMM. & HIGH TECH. L. 73, 75 (2003).

^{43.} See CHRISTOPHER L. EISGRUBER, CONSTITUTIONAL SELF-GOVERNMENT 57-59 (2002) (describing nature of judicial impartiality).

posed by new technologies as opposed to waiting for those technologies to mature before taking action. In particular, Congress enacted the CTEA and the DMCA in response to such arguments. Second, as a result of these enactments, the federal courts are addressing significant intellectual property policy issues in the context of constitutional scrutiny rather than interstitial lawmaking. In *Eldred v. Ashcroft*, which involved a constitutional challenge to the CTEA, the Supreme Court emphasized that institutional competence concerns limit judicial oversight based on constitutional principles even where the policy judgment at issue appears "arguably unwise."⁴⁴ Even in *Eldred*, however, the Supreme Court did not slam the constitutional oversight door shut; the Court's decision, for example, stressed the importance of "built-in First Amendment accommodations,"⁴⁵ thereby allowing litigants to argue that the DMCA, unlike the CTEA, fails that requirement.⁴⁶

With the intense focus on the judicial battles, some commentators fail to appreciate that the federal courts are unlikely to be the sole battleground for the future of copyright policy. In particular, there are a number of developments that suggest that the FCC and other actors will play an important role in regulating content in the digital age. In an effort to extend the DMCA's legacy of limiting digital copying, Senator Hollings proposed that, if the relevant industries did not adopt a copy protection standard for all digital devices, the FCC should adopt one and impose it on the marketplace.⁴⁷ Unlike during the debate over the DMCA, the technology community is now far more vigilant about opposing such efforts, so this measure seems unlikely to pass.⁴⁸

12

^{44.} Eldred, 123 S. Ct. 769, 783 (2003). This admonition follows what Chris Eisgruber views as an important principle of constitutional law: where "strategic issues dominate moral ones... the case for judicial deference to legislatures is strong." Christopher L. Eisgruber, *Constitutional Self-Government and Judicial Review: A Reply To Five Critics*, 37 U.S.F. L. REV. 115, 182 (2002). *See also* Philip J. Weiser, *Justice White and Judicial Review*, 76 U. COLO. L. REV. 1305 (2003) (arguing that Justice White's judicial practice acutely reflected this sensitivity).

^{45.} Eldred, 123 S. Ct. at 788.

^{46.} It is worth noting that, even where the courts ground their copyright decisions on constitutional grounds, they can still make contingent rulings by leaving open the door for congressional revision. See Eisgruber, supra note 44, at 203 (explaining the benefits of this strategy, as used in the Dormant Commerce Clause cases). In Feist, however, the Court did not take this route. Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340 (1991). See Thomas Nachbar, The Quest To Keep Copyright Pure, 2 J. ON TELECOMM. & HIGH TECH. L. 33, 37-38 (2003) (criticizing this aspect of Feist).

^{47.} Consumer Broadband and Digital Television Promotion Act of 2002, S. 2048, 107th Cong. (2002), *available at* http://www.eff.org/IP/SSSCA_CBDTPA/20020321_s2048_cbdtpa_bill.pdf.

^{48.} See Lisa Bowman, Tech Execs Lash Into Piracy Proposals, CNET NEWS.COM, (Mar. 14, 2002) (noting opposition to proposal), at http://news.com.com/2100-1023-860192.html. In the wake of this proposal, a number of technology companies and

Nonetheless, the FCC may well play an important role in this area, as the cable and the consumer electronics industries' recent cable compatibility agreement asks it to develop a regime to govern the nature of permissible copying of digital content.⁴⁹ On another non-judicial front, the revision of the Uniform Commercial Code to require the enforcement of click-through licenses, which is often painted as a threat to fair use rights in the digital age,⁵⁰ has stalled at the state level.⁵¹ Finally, to the extent that industry consortia or standard setting bodies shape the development of digital rights management systems, it remains to be seen whether they take account of user concerns—be they privacy or fair use.⁵²

The final issue, and the one most open to different regulatory strategies, is privacy policy. At present, there is no clear federal policy on informational privacy. The FCC has adopted certain rules governing telephone companies' use of customer information, but those will rules will likely be tested in court. Indeed, the Tenth Circuit invalidated the FCC's earlier ones on the ground that they failed to account for First Amendment concerns (i.e., the right of the telephone company to speak to its customers).⁵³ In the absence of any Internet privacy rules, the Federal Trade Commission has partially filled the vacuum by ensuring that companies adhere to their advertised privacy policies.⁵⁴ Similarly, a number of state legislatures—as well as state attorneys general—have

2003]

organizations have formed the Alliance For Digital Progress to lobby against this or similar measures. *See* http://www.alliancefordigitalprogress.org.

^{49.} See Implementation of § 304 of the Telecomms. Act of 1996; Commercial Availability of Navigation Devices; Compatibility Between Cable Systems and Consumer Electronics Equipment, *Further Notice of Proposed Rulemaking*, 18 F.C.C.R. 518 (2003); see also Fixing Spectrum Policy Is Among Powell's Top Priorities, COMMUNICATIONS DAILY, Jan. 13, 2003, LEXIS, Nexis Library, Communications Daily File ("Intellectual property is Achilles heel of overall digital transition and FCC is 'groping its way through what role it can play.") (quoting Michael Powell, FCC Chairman).

^{50.} See, e.g., Yochai Benkler, Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain, 74 N.Y.U. L. REV. 354, 429-40 (1999) (criticizing movement to revise the UCC to facilitate the licensing of content).

^{51.} See Paul Festa, States Spar Over Stalled Software Act, CNET NEWS.COM, (July 30, 2002), at http://news.com.com/2100-1023-947182.html.

^{52.} For a discussion of how digital rights management regimes could be designed to accommodate fair use, see Dan L. Burk & Julie E. Cohen, *Fair Use Infrastructure for Rights Management*, 15 HARV. J.L. & TECH. 41 (2001).

^{53.} See U.S. West, Inc. v. FCC, 182 F.3d 1224 (10th Cir. 1999) (invalidating FCC rules addressing use of customer information).

^{54.} See Patricia Jacobus, FTC Investigates DoubleClick's Data-collection Practices, CNET NEWS.COM, (Feb. 16, 2000), at http://news.com.com/2100-1023-237007. html?legacy=cnet.

proceeded to develop their own initiatives to address the issue.⁵⁵ Finally, a number of self-regulatory efforts, including programs like Trustee and BBBOnline, and standard setting ones, such as the World Wide Web Consortium's Platform for Privacy Preferences (P3P), have attempted to address the issue.

Given the significant debate on the issue and the diverse set of possible approaches, privacy policy may well prove to be a valuable testing ground for other Internet policy issues. Unlike digital rights management, network unbundling, network neutrality, or spectrum policy, most Internet users understand threats to their privacy and have complained in the face of sharing personal information without their permission.⁵⁶ Moreover, privacy is an area where state actors can experiment with different approaches (say, as to local telephone companies⁵⁷) and, depending on the nature of a federal regime, state entities may also play a role in enforcement. Finally, given the industry's strong self-interest in building confidence in e-commerce, this area may also be one where standard setting solutions or other self regulatory ones will be supported adequately and will develop quickly enough to make a difference.

III. CONCLUSION

Because the policymaking world moves in years, not months, the response to the Internet and information industries revolution that began in the mid-1990s is still in its infancy. Over time, policymakers will develop a set of regulatory strategies that will rely on some combination of the models of regulation discussed above. At present, however, it is not only clear that many important information law problems remain unsolved, but also that we have not even fully developed our understanding of *how* to solve them. That most certainly does not mean we should wait to do so; it does mean that, despite our best efforts, we are unlikely to resolve these issues the first time around. But with experimentation and reform efforts over time, we are likely—at least if

^{55.} A number of states, for example, have passed anti-spam laws. For a full list of states governing spam, see *Anti-Spam Laws: State-by-State*, ZDNET.COM, *at* http://techupdate.zdnet.com/techupdate/stories/main/0,14179,2880726,00.html.

^{56.} For an example of one such incident, see *Lilly Settles With State*, SILICON VALLEY/SAN JOSE BUSINESS JOURNAL, (Jul. 25, 2002) (reporting on incident where email addresses of users of Prozac were publicly released), *available at* http://www.bizjournals.com/ sanjose/stories/2002/07/22/daily61.html.

^{57.} See, e.g., In re Dissemination of Individual Customer Proprietary Network Information, 2002 WL 257813, *4 (Ariz. C.C. Jan. 28, 2002) (regulating incumbent provider's use of customer information).

the past is prologue—to find our way to a relatively stable and sound regulatory regime.

CENSORSHIP, COPYRIGHT, AND FREE SPEECH:

SOME TENTATIVE SKEPTICISM ABOUT THE CAMPAIGN TO IMPOSE FIRST AMENDMENT RESTRICTIONS ON COPYRIGHT LAW

CHRISTOPHER L. EISGRUBER*

INTRODUCTION

A burgeoning tide of scholarship urges courts to subject copyright law to heightened scrutiny under the Free Speech Clause. Articles of this genre commonly begin by trying to shock the reader into recognizing the repressive character of copyright law. For example: "In some parts of the world, you can go to jail for reciting a poem in public without permission from state-licensed authorities. Where is this true? One place is the United States of America [if the poem in question is protected by copyright]."¹ Another example: "Copyright gives the government authority to seize books and enjoin their sale, award damages against booksellers, or even send them to jail.... If the justification were anything other than copyright, these sweeping powers would be seen as a gaping hole at the heart of free speech rights."²

The authors then go on to make a variety of recommendations, some more radical than others, but all variations upon the same message: copyright law has been unjustifiably exempted from First Amendment

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^{1.} Jed Rubenfeld, *The Freedom of Imagination: Copyright's Constitutionality*, 112 YALE L.J. 1, 3 (2002).

^{2.} Rebecca Tushnet, *Copyright as a Model for Free Speech Law: What Copyright Has in Common with Anti-Pornography Laws, Campaign Finance Reform, and Telecommunications Regulation,* 42 B.C. L. REV. 1, 4-5 (2000).

restrictions, and it is time for courts to examine its constitutionality more aggressively. These arguments have never found much favor with the Supreme Court.³ They once again met with a frosty reception in *Eldred* v. *Ashcroft*,⁴ but *Eldred* is unlikely to stem the tide of academic criticism.

As an outsider to copyright scholarship, I want to express some skepticism about this intellectual trend. In my view, there is a good reason why courts have traditionally regarded copyright law as consistent with the Free Speech Clause. Most of Free Speech law rests on a concern about censorship: it rests, in other words, on a judgment that government ought not to prohibit the dissemination of ideas because it deems them wrong or harmful.⁵ For example, the government ought not suppress speech because it criticizes politicians or policies, or because it is subversive, or because it is counter-cultural, or because it deals with delicate subject-matters such as sex or religion. Copyright is not censorious in this way. Copyright does not pick and choose among ideas and subject-matters. Smutty pictures and subversive tracts get copyright protection along with reverent hymns and patriotic speeches.

Of course, censorship is not the only concern of Free Speech law. The prohibition upon censorship does not, for example, fully explain the "public forum doctrine" or First Amendment restrictions on "time, place, and manner" laws. Later, we will consider these areas of First Amendment doctrine in more depth. Still, the story of copyright should at least begin with a recognition that copyright is not censorship, rather than with shocked expressions of outrage that Americans might be

^{3.} The leading precedent is *Harper & Row Publishers, Inc. v. Nation Enters.*, 471 U.S. 539 (1985). *Harper & Row* rejected a First Amendment challenge to copyright law; the Court emphasized that copyright is an "engine of free expression," *id.* at 558, and that "First Amendment protections [are] already embodied in [copyright law's] distinction between copyrightable expression and uncopyrightable facts and ideas, and the latitude . . . afforded by fair use" *Id.* at 560.

^{4. 537} U.S. 186 (2003). *Eldred* dealt with two challenges to the constitutionality of the Copyright Term Extension Act, Pub. L. No. 105-298, § 102(d)(1)(B), 112 Stat. 2827-2828 (1998) (codified as amended at 17 U.S.C. § 302 (2000)). In addition to their First Amendment challenge, petitioners contended that the Act was outside of Congress' enumerated powers. This article does not treat the enumerated powers claim; for discussion, see Thomas Nachbar, *Judicial Review and the Quest to Keep Copyright Pure*, 2 J. ON TELECOMM. & HIGH TECH. L. 33 (2003).

^{5.} See, e.g., Turner Broad. Sys. v. Fed. Communications Comm'n, 512 U.S. 622, 641 (1994) (regulations that "stifle[] speech on account of its message" contravene an "essential" First Amendment right because they attempt to "suppress unpopular ideas or information or manipulate the public debate through coercion rather than persuasion"); Police Dep't of Chi. v. Mosley, 408 U.S. 92, 95 (1972) ("above all else, the First Amendment means that government has no power to restrict expression because of its message, its ideas, its subject matter or its content"). See also LAURENCE H. TRIBE, AMERICAN CONSTITUTIONAL LAW 790 (2d ed. 1988) (if the Free Speech clause is "not to be trivialized, it must mean that government cannot justify restrictions on free expression by reference to the adverse consequences of allowing certain ideas or information to enter the realm of discussion and awareness").

arrested for reciting (copyrighted) poems or for disseminating (copyrighted) books. And, I shall argue, the distinction between copyright and censorship in fact takes us pretty far. Once we realize the importance of that distinction to Free Speech law, the case for imposing judicially enforced restrictions upon copyright policy becomes weak.

I. CONTEXT

Even if the United States had no copyright laws, you could go to jail for reciting a poem in public. Shouting Jabberwocky in a crowded theater or a courtroom will probably do the trick (you will be charged with trespass or disorderly conduct).⁶ In fact, you could be sanctioned for reciting an original poem of your own devising in public *or in private*. Suppose that you work for a company, and as part of your contract you promise to keep certain secrets that you learn on the job. Despite your promise, you decide (in exchange for a tidy sum) to share the secrets with a competitor. Your company learns of this plan and successfully seeks an injunction to keep you from talking. You decide to ignore the injunction. Because you are in a playful mood, you decide to report your secrets in the form of a poem (which you recite in public or in private; it makes no difference). You can be held in contempt of court (and perhaps prosecuted for theft as well).⁷

It would be possible to multiply these examples at some length. It is not, in other words, at all shocking that you can go to jail for reciting a poem. And, in fact, despite the outraged rhetoric that seems common in the new wave of copyright and First Amendment scholarship, none of the authors claim that Americans have a right to sell copies of duplicated works or to perform plays without paying royalties. Copyright's critics all agree, in other words, that copyright laws can justify seizing books, jailing people for reciting poems, and so on – just as most people and courts have long believed.⁸

So why the sudden concern about copyright's constitutionality? The most important explanation has to do with the evolution of American copyright policy. Copyright law has become increasingly

^{6.} Yochai Benkler worries that, in principle, copyright might restrain one from reciting Jabberwocky. Yochai Benkler, *Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain,* 74 N.Y.U. L. Rev. 354, 390-91 (1999). In practice, one is free to recite the poem because, as Benkler notes, it has passed into the public domain. *Id.*

^{7.} See, e.g., 18 U.S.C. 1832(a)(2) (2003) (making it a crime to "communicate" trade secrets without authorization).

^{8.} *See, e.g.,* Jed Rubenfeld, *supra* note 1, at 48-49 (arguing that it is fully constitutional to prohibit the "pirating" of other people's work); Tushnet, *supra* note 2, at 3 ("copyright is constitutional, in large part because it . . . encourage[s] speech by the people it protects").

[Vol. 2

restrictive. Congress and the courts have extended the term of copyright protection, widened protection for "derivative works," and narrowed the "fair use" exception.⁹ Many scholars have suggested that while traditional copyright laws may have left ample room for free expression, the new, more vigorous policies do not.¹⁰ These new intrusions on liberty have goaded lawyers and scholars into re-examining the relationship between copyright and free speech.

At the same time, new digital technologies have expanded the opportunity for individual users to appropriate and disseminate copyrighted works. Internet users equipped with relatively cheap computers can download, edit, and distribute text, pictures, music and movies. In other words, not only is copyright law becoming more restrictive, but it is doing so when there is an increasingly wide range of expressive behavior for it to restrict.¹¹ These developments, of course, are related. Movie studios and the music business (among others) have sought tougher copyright laws in order to prevent people from using the new technologies to copy their products.¹² Still, it seems reasonable to regard new technology as an independent cause of revisionist thinking about copyright's First Amendment status. Some scholars and lawyers may have been motivated by a sense of lost opportunities: just when technology promised wondrous forms of new expression - such as Hollywood-style movies made at home by school children manipulating video clips on desktop machines – copyright restrictions snatched away (or at least compromised) the magic that technology had made possible.

These first two causes – more restrictive laws and expanded opportunities to use existing works – pertain to the subject-matter of copyright law. There may be a third cause for the new interest in copyright's constitutionality, one that emanates beyond copyright's borders in the theoretical currents that shape scholarship about free speech. Constitutional thinkers have become increasingly concerned about the character of American public discourse. They worry that it is inegalitarian, so that rich people drown out the voices of poor people, or that it is banal, so that commercial entertainment suffocates individual artistry. Copyright plays a villain in this story. It protects the interests of media giants at the expense of the little people. If copyright laws were

^{9.} For specific examples of these changes, *see, e.g.,* Lawrence Lessig, *Copyright's First Amendment,* 48 U.C.L.A. L. Rev. 1057, 1065 (2001), and Neil Weinstock Netanel, *Locating Copyright Within the First Amendment Skein,* 54 Stanford L. Rev. 1, 17-19 and 20-24 (2001).

^{10.} See, e.g., Lessig, supra note 9, at 1062-1065; Netanel, supra note 9, at 17-26.

^{11.} Netanel, *supra* note 9, at 28-29.

^{12.} See, e.g., id., at 63-65 (giving examples of rent-seeking by media interests), and Joseph P. Liu, *Copyright and Time: A Proposal*, 101 Mich. L. Rev. 409, 448 (2002) (commenting upon the power of the "copyright industries").

less restrictive, then perhaps American public discourse could be more democratic, varied, creative, or fulfilling.¹³

I sympathize with the claim that some elements of copyright law have gone too far. But the fact that copyright restrictions are unwise does not entail that they should be subject to First Amendment scrutiny. Copyright's critics recognize that point, of course, and they also know that copyright does not, on its face, appear to involve discrimination on the basis of viewpoint or content. They have accordingly offered thoughtful arguments to back up their claim that copyright poses a serious threat to the Freedom of Speech; the sections that follow take up some of those arguments.

II. COPYRIGHT AND FREE SPEECH

A. Is Copyright Suspect Simply Because it Targets Speech?

Copyright law obviously restricts expression. Moreover, it restricts only expression. If a law prohibits noise, you can violate it either by revving a motorcycle engine or by delivering a loud speech; if a law prohibits the publication of derivative works, you can violate it *only* by engaging in expressive activity. In that sense, copyright law explicitly *targets* expressive activity. Some copyright scholars assume that this targeting creates at least a *prima facie* case for heightened scrutiny under the First Amendment, so that copyright can escape such scrutiny only if it falls under some special exception to ordinary First Amendment doctrines.¹⁴

This view is plausible enough, and it undoubtedly has some support in the way that the Supreme Court ordinarily discusses free speech. I believe, however, that it is fundamentally mistaken. At issue is the basic question, "From *what* must speech be free in order for 'the freedom of speech' to exist?" Must it be free from any restraints whatsoever? Or must it be free only from certain kinds of especially destructive or dangerous restrictions?¹⁵

On the first view, of course, complete freedom of speech would be unattainable. There are all sorts of restrictions on speech. You cannot shout in crowded theaters or seize control of printing presses, for example. If you are an attorney, you cannot divulge the secrets of your clients. You cannot sign contracts without subjecting yourself to liability

^{13.} See, e.g., Yochai Benkler, supra note 6, at 377-84, 400-08.

^{14.} See, e.g., Tushnet, supra note 2, at 5-6; Netanel, supra note 9, at 42-47.

^{15.} An exactly analogous question arises with regard to the Free Exercise Clause. Christopher L. Eisgruber and Lawrence G. Sager, *Congressional Power and Religious Liberty After* City of Boerne v. Flores, 1997 Sup. Ct. Rev. 79, 110-11 (1997).

in the future. You cannot duplicate and republish works protected by copyright. Proponents of the first view would, of course, concede the validity of these and many other restrictions on speech. They would, however, say that we had traded away some of our "freedom of speech" in order to achieve other goals.

That claim strikes me as counter-intuitive. I do not believe that we sacrifice our freedom of speech, even in small measure, when we pass laws that criminalize disorderly conduct in theaters, establish property rights in printing presses, protect client secrets, impose contractual liability, or prohibit the unauthorized duplication of books and movies. It is more sensible, I think, to say that the freedom of speech is not at issue in such cases. Speech need not be *free from any restraints whatsoever* in order to be genuinely *free*. Instead, speech need be free only from certain kinds of regulations, such as (paradigmatically) viewpoint-based censorship or (almost as importantly) some kinds of content-based censorship.¹⁶

Free Speech doctrine is largely consistent with this view. When risks of censorship are low, laws regulating speech receive relatively minimal scrutiny. For example, when the Supreme Court deals with "time, place, and manner" regulations or with laws that impose incidental burdens on expressive conduct, it uses tests articulated in *Ward v. Rock Against Racism*¹⁷ and *United States v. O'Brien.*¹⁸ Professor Netanel correctly notes that courts usually apply these tests in ways that "give considerable deference to government regulation."¹⁹ As interpreted, the tests appear "to prohibit only gratuitous inhibition of speech, where the governmental interest behind a regulation would actually be achieved more effectively if the regulation did not exist."²⁰

B. Is Copyright Content-Based?

The crucial question, in my view, is not whether copyright regulates speech (it obviously does), but whether it exhibits the characteristic vices that should trigger heightened First Amendment scrutiny. Does it? Some scholars have contended that, initial appearances notwithstanding,

^{16.} On the distinction between content-based and content-neutral laws, *see, e.g.,* Laurence Tribe, *supra* note 5, at 789-804; Netanel, *supra* note 9, at 30-36, 47-54; Geoffrey R. Stone, *Content-Neutral Restrictions*, 54 U. Chi. L. Rev. 46, 47-57 (1987); Erwin Chemerinsky, *Constitutional Law: Principles and Policies* 758-63 (1997).

^{17. 491} U.S. 781 (1989).

^{18. 391} U.S. 367 (1968).

^{19.} Netanel, *supra* note 9, at 55.

^{20.} *Id.* For a thorough treatment of First Amendment restrictions upon content-neutral laws, *see generally* Stone, *supra* note 16. For further discussion of the application of these restrictions to copyright, *see infra* text accompanying notes 35-45.

copyright restriction is content-based and so demands heightened scrutiny under existing First Amendment doctrine. One version of this argument contends that copyright law is content-based simply because one must analyze the content of a publication in order to determine whether it infringes upon a copyright: the content must duplicate, or at least derive from, the protected work.²¹ In that respect, copyright restrictions are different from "time, place, and manner" restrictions, which regulate or prohibit all speech without regard to its content. If, for example, a law prohibits loud noises near hospitals, you need not know the content of a speech to determine whether it violates the law – all you need to know is the decibel level.

As Professor Netanel has pointed out, this argument rests on a misconception about the reasons for caring whether a law is contentbased.²² It makes sense to subject government regulation to more intense judicial scrutiny when the government seeks to suppress discussion about particular subject-matters, such as politics, religion, or sexuality. When the government does that, it exhibits the core vice of censorship. Its regulation presupposes that the public cannot be trusted to deal competently with information about some topic and that the public is accordingly better off if the government regulates the flow of such communication. Copyright law is not content-based in this sense. Courts must indeed inspect the content of communications to determine whether they infringe upon copyrights. But copyright law does not treat some topics differently from others.

There is a second, more sophisticated argument about why we should regard copyright law as content-based. This argument begins by pointing out that some provisions of copyright law do favor communications about some topics over other communications. The "fair use" doctrine allows speakers greater latitude to use protected works when matters of public concern are at stake. This preference for speech about matters of public concern is arguably content-based in the relevant sense.²³

There is something odd about this argument. Its asks us to believe that copyright law becomes *worse* from a First Amendment perspective because of a restriction that not only makes it *less* restrictive, but does so with regard to core First Amendment subjects. Indeed, First Amendment doctrine itself contains a discrimination like the one in the "fair use" provisions. Under *Times v. Sullivan*²⁴ and its progeny,

^{21.} Mark A. Lemley and Eugene Volokh, Freedom of Speech and Injunctions in Intellectual Property Cases, 48 DUKE L. J. 147, 186 (1999).

^{22.} Netanel, *supra* note 9, at 48-50.

^{23.} Tushnet, *supra* note 2, at 25-27.

^{24. 376} U.S. 254 (1964).

defendants in libel suits acquire special First Amendment protection if their speech deals with matters of public concern.²⁵ It would be strange if copyright law became subject to heightened First Amendment scrutiny only because it afforded speakers protections comparable to those recommended by the First Amendment itself.

Copyright's critics, however, claim a precedent on their side. Regan v. Time, Inc.,²⁶ dealt with a federal statute that made it unlawful to produce photographic images of United States currency. The law contained an exception that allowed the use of such images in news reports or other reports on matters of public concern. The Supreme Court held that the exception rendered the statute impermissibly content-based.²⁷ Copyright's critics say that Regan compels us to conclude that copyright law, too, is content-based.²⁸

The anti-counterfeiting law at issue in *Regan* differs from copyright law in at least one important respect. The anti-counterfeiting law would have been content-based even without the exception for matters of public concern. The government had decided that one particular subject-matter – namely, the appearance of United States currency – required special regulation. This was not a traditional case of censorship: the government was worried that pictures of money might facilitate counterfeiting, not that these pictures would lead people to form dangerous ideas. Still, the law in *Regan* was a step closer to the kinds of problems that motivate First Amendment doctrine's special concern with content-based regulations.

I would not, however, want to stake too much on this formal distinction between copyright law and the anti-counterfeiting statute at issue in *Regan. Regan* is a peculiar case. It is hardly a compelling foundation for accepting what is already a peculiar argument – namely, that copyright law becomes worse, rather than better, by incorporating a "fair use" doctrine that favors speech related to matters of public concern.²⁹ If *Regan* entailed this result, that would be a good reason to abandon *Regan*, not to doubt copyright's constitutionality. The fact that copyright's critics put forward such an odd, counter-intuitive argument for their position seems, in my judgment, to weaken rather than buttress their claims.

I accordingly believe that Professors Netanel and Chemerinsky are correct when they conclude that copyright law is a content-neutral, not

^{25.} See, e.g., TRIBE, supra note 5, at 873-86.

^{26. 468} U.S. 641 (1984).

^{27.} Id. at 648-49.

^{28.} Tushnet, *supra* note 2, at 25-26. (Netanel reads *Regan* differently, *supra* note 9, at 51-52, as consistent with a content-neutral treatment of copyright law.)

^{29.} Justice Stevens observed as much in his separate opinion in Regan. 468 U.S. at 698 & n.1.

content-based, restriction upon speech.³⁰ The same cannot be said, however, of some laws recently enacted in the name of copyright. In particular, some provisions of the Digital Millennium Copyright Act (DMCA) appear to prohibit the dissemination of information about how to circumvent anti-copying technology.³¹ Professor Netanel has coined the term "paracopyright" to describe this law: it does not simply prohibit copying, but prohibits speech (including highly original speech) about how to engage in copying.³² "Paracopyright" restrictions on speech are classic instances of content-based regulation: the government is regulating speech about a particular topic (namely, the circumvention of copy-protection technology) because it fears that the dissemination of such ideas will have harmful consequences. Insofar as "paracopyright" regulates speech in this way, it should be tested according to the demanding standards applicable to content-based regulation. This conclusion about "paracopyright" does not, however, provide any reason to reassess the conclusion that ordinary copyright law is content-neutral. "Paracopyright" and copyright are, for these purposes, very different animals.

C. Is Copyright Like Libel?

Can we analogize copyright law to libel law? Libel law might seem to share certain key characteristics with copyright law.³³ For example, libel law does not, on its face, target any particular topic or viewpoint; it permits speech on any topic, so long as it is not defamatory, and, conversely, it prohibits defamatory speech on any topic. Yet, despite this apparent neutrality, libel law is subject to heightened First Amendment scrutiny. Since *Times v. Sullivan*, speakers who criticize public officials enjoy First Amendment immunity even for false statements unless they act with reckless disregard for the truth. *Sullivan*, unlike *Regan*, is a core First Amendment precedent, and some scholars suggest that it is now time for courts to announce a copyright law counterpart to *Sullivan*.

Libel is not like copyright, however. Libel's apparent neutrality is deceptive. As *Sullivan* itself illustrates, libel law creates opportunities for viewpoint-based censorship on a case-by-case basis. Libel law empowers judges and juries to decide which speech is defamatory, and they may

^{30.} Netanel, *supra* note 9, at 49-50; Erwin Chemerinsky, 36 Loy. L. A. L. Rev. 83, 93-94 (2002).

^{31. 17} U.S.C. § 1201 (2000). The law stipulates that no person shall "offer to the public" or "otherwise traffic" in anti-circumvention technology. 17 U.S.C. § 1201(2). That prohibition may be read to prohibit publication of information about how to circumvent copy-protection devices.

^{32.} Netanel, *supra* note 9, at 24-26.

^{33.} See, e.g., Rubenfeld, supra note 1, at 26-27; Benkler, supra note 6, at 393-94.

favor popular plaintiffs over unpopular speakers. It does not matter that judges and juries, rather than legislators, exercise this censorial power.

Libel law is, moreover, censorial on its face. It puts you at risk of liability when you make critical remarks about people, but not when you say nice things about them. In the domain of politics, this asymmetry favors some viewpoints over others: you can get sued if you criticize government officials but not if you praise them.

This concern with censorship may not fully explain *Sullivan*'s expansive rule. Its protections are very broad. Some people believe that *Sullivan* goes much further than is needed to eliminate the risk of viewpoint-based censorship. If so, the decision might be justifiable only on the basis of a claim that libel law, even if applied even-handedly, would leave us with an insufficiently robust political discourse. That sort of rationale would take us much closer to concerns legitimately raised by copyright policy, and we will consider it in the next subsection. For the moment, I want only to emphasize that one cannot draw casual analogies between the First Amendment treatment of libel and copyright. Libel law triggers First Amendment concerns about government censorship, whereas copyright does not.³⁴

D. Does Copyright Leave Enough Space for Expressive Activity?

Some important First Amendment doctrines do not seem explicable in terms of a concern about viewpoint-based or content-based censorship. The "public forum doctrine" is a good example.³⁵ The doctrine requires government to allow speech in "traditional public fora," such as streets and parks. Government cannot forbid expressive activity in these fora even if it does so even-handedly and across-the-board.

Perhaps one can justify this doctrine as an effort to "smoke out" hidden cases of viewpoint discrimination. One might suspect that when legislatures prohibit speech in traditional public fora, they are usually

26

^{34.} During discussion of this paper at the Conference in Boulder, some of copyright's critics contended that copyright was no less censorial than libel law. They offered *Religious Tech. Ctr. v. Netcom On-Line Comm. Servs., Inc.*, 923 F. Supp. 1231 (N.D. Cal. 1995), as an example of copyright's censorial tendencies. In that case, Scientologists used copyright law to prohibit former members, who were critical of the church, from publishing church documents on the web. *Id.* at 1238. But this case is not remotely comparable to *Times v. Sullivan*, where a state institution – namely, a jury – used libel law to punish critics of government officials. On the contrary, *Religious Tech. Ctr.* shows the even-handedness of copyright law: the court protected an unpopular minority (the Scientologists) from mainstream criticism, and it did so at the initiative of a purely private party (the church itself). *Id.* at 1265-66. The First Amendment's central concern is with laws that enable the government to pick and choose among ideas – and *Religious Tech. Ctr.* does not involve that vice.

^{35.} See, e.g., Schneider v. State of New Jersey, 308 U.S. 147 (1939) (invalidating an ordinance that prohibited the distribution of leaflets on public property); Chemerinsky, *supra* note 16, at 918-34; Stone, *supra* note 16, 86-94.

trying to suppress social and political protests. If so, the public forum doctrine would help to effectuate the core First Amendment interest in preventing government censorship. But it seems plausible that the public forum doctrine also reflects other normative judgments, such as the judgment that we are better off if political debate is robust, and that we lack sufficient space for such argument if the government excludes it from parks and streets.³⁶ Something similar might be said about the broad, highly protective rules of *Times v. Sullivan*. The best justification for those rules might relate not only to the risk that libel law will be applied in discriminatory fashion, but also to a judgment that libel law, even if fairly applied, would leave too little "space" for energetic political exchange.

Perhaps, then, one can justify First Amendment restrictions on copyright law by analogy to the public forum doctrine. The idea would be that today's new, more restrictive copyright laws leave us with too little "space" for expressive activity, just as do statutes that prohibit speech on the streets or in parks. Is that a plausible claim?

Certainly one can imagine copyright regimes so drastic that they would threaten to suffocate public discourse. Melville Nimmer analyzed these possibilities in a classic article published more than three decades ago.³⁷ He contended, for example, that if people were unable to republish certain news photographs, they might have no way to discuss important political matters.³⁸ If copyright law were to dispense with the crucial distinction between "idea" and "expression," then the publication of one article on a subject might prevent anybody else from making – or criticizing – the points asserted by the author.³⁹ Copyright would eat away the discursive space until nothing more remained to be said!

It thus seems obvious that, at some point, highly restrictive copyright laws would pose First Amendment problems, even if the laws involved no viewpoint-based or content-based censorship. It is therefore an error to say, as the United States Court of Appeals for the District of Columbia Circuit recently did, that "copyrights are categorically immune

^{36. &}quot;The Court's analysis of content-neutral restrictions is designed primarily to assure that adequate opportunities for free expression remain open and available . . . The Court's analysis is also shaped, however, by such secondary considerations as disparate impact, public property, tradition, discrimination against speech, incidental effect, and communicative impact." Stone, *supra* note 16, at 117. *See also* Tribe, *supra* note 5, at 978 ("even a wholly neutral government regulation or policy . . . may be invalid if it leaves too little breathing space for communicative activity, or leaves people with too little access to channels of communication, whether as would-be speakers or as would-be listeners").

^{37.} Melville B. Nimmer, *Does Copyright Abridge the First Amendment Guarantees of Free Speech and Press?*, 17 U.C.L.A. L. Rev. 1180 (1970).

^{38.} Id. at 1197-99.

^{39.} *Id.* at 1186.

from First Amendment challenges."⁴⁰ But the conditions on copyright law that we have thus far discussed (that is, the ones that Nimmer identified many years ago) are rather minimal. In that respect, they are parallel to the guarantees of the public forum doctrine. It is worth noting how *little* that doctrine guarantees. It does not, for example, guarantee access to the mass media. More generally, the doctrine does not guarantee that people will have the means necessary to express their message effectively. Nor does it forbid the government from applying "time, place, and manner" regulations to parks and public streets. The public forum doctrine only preserves one set of venues for speech that might otherwise have no outlet whatsoever.⁴¹

Copyright's contemporary critics ask more than that. They insist that unless speakers have the right to adapt, reuse, and reproduce film clips, music, and other works originally produced by others, they may not be able to express their ideas as exquisitely as they might otherwise do. Yochai Benkler, for example, laments the plight of a child who wants to incorporate a clip from *Schindler's List* into a class presentation about her grandmother and the Holocaust, but finds herself stymied by the restrictions of copyright law.⁴² The public forum doctrine does not promise anybody such refined forms of expression; it guarantees only access to the barest, most commonly shared of communicative resources.

I do not, however, want to overstate my point. The Court's rulings about content-neutral regulations have been varied and complex, if not inconsistent.⁴³ It is possible to use some of these decisions to support arguments calling for heightened scrutiny of copyright laws. Professor Netanel has made a careful and interesting argument of that kind.⁴⁴ But it would be a mistake to suppose that Professor Netanel's argument, or others like it, involve merely a straightforward extension of wellestablished Free Speech doctrine into the domain of copyright. Such arguments instead depend upon contestable choices among competing precedents and, ultimately, controversial normative arguments about the

^{40.} Eldred v. Reno, 239 F.3d 372, 375 (D.C. Cir. 2001), aff'd sub nom. Eldred v. Ashcroft, 123 S. Ct. 769 (2003).

^{41. &}quot;The 'public forum' doctrine holds that restrictions on speech should be subject to higher scrutiny when, all other things being equal, that speech occurs in areas playing a vital role in communication-such as . . . streets, sidewalks, and parks-especially because of how indispensable communication in these places is to people who lack access to more elaborate (and more costly) channels of communication." TRIBE, *supra* note 5, at 987 (footnotes omitted).

^{42.} Yochai Benkler, From Consumers to Users: Shifting the Deeper Structures of Regulation Toward Sustainable Commons and User Access, 52 FED. COMM. L.J. 561, 570-71 (2000).

^{43.} See Stone, supra note 16, at 48-54 and passim.

^{44.} Netanel, *supra* note 9, at 54-67. Netanel's argument relies heavily on *Turner Broad. Sys., Inc. v. FCC*, 512 U.S. 622 (1994).

point of First Amendment law – arguments such as Professor Netanel's claim that "the First Amendment must ensure that systemic political infirmities have not skewed public discourse and shortchanged the underrepresented public interest in expressive diversity."⁴⁵

III. TWO CONCEPTIONS OF CONSTITUTIONAL RIGHTS

I want now to set these arguments in a more abstract context. One might conceive the role of constitutional rights in two different ways. On one conception, the purpose of rights is to produce an optimal environment for important activities and pursuits – such as expression, religion, political participation, and intimate relationships. On a second, competing conception, rights have a more limited goal: their point is only to proscribe certain forms of government action that are especially damaging to important activities and pursuits. The first conception focuses on the ideal of *optimal flourishing*; the second conception focuses on *categorical prohibitions* of government practices that pose special threats to constitutional values.

These distinct conceptions of rights carry different entailments. A conception built around the goal of *optimal flourishing* will inevitably concern itself with the incidental, unintended effects of laws. For example, any law that defines property rights in communicative resources (such as copyrights, printing presses, and broadcast spectrum) will have some impact upon the capacity of people to express themselves. This impact will be of concern to a conception of free speech that aims at optimal flourishing. In general, the impact of laws on expressive flourishing will be complex: most laws will increase the expressive autonomy of some people and decrease the expressive autonomy of others. Their precise impact will depend on a number of contingent, empirical factors that may be difficult to assess. The jurisprudence of optimal flourishing will therefore be thoroughly pragmatic and beset with trade-offs and blurred lines: it will be an effort to say how much of a burden on liberty is "too much" within a framework that both treats every

^{45.} Netanel, *supra* note 9, at 63. I am skeptical about this formulation of First Amendment goals. Suppose, for example, that we have two copyright regimes, A and B. Regime A would do more to encourage speech by large producers (e.g., Disney) and Regime B would do more to encourage speech by small, avant garde movie studios. Should we assume that Regime B is better, from a First Amendment perspective, than Regime A, because it promotes greater "diversity"? Would that be true even if most people preferred Regime A, because they preferred the informational products produced by Disney to the informational products produced by the smaller studios? Much of the recent scholarship about First Amendment and copyright seems to assume that these questions obviously deserve 'yes' answers – but I am not at all sure of that.

burden as a cause for constitutional regret and simultaneously acknowledges that some burdens will inevitably exist.

A conception of rights built around *categorical prohibitions* can have a different character. Because it focuses on certain, especially damaging forms of government action, it may limit itself to intentional burdens upon liberty (though it need not do so). For example, a *categorical* conception of Free Speech need not concern itself with every burden on expressive activity, but only those that take certain forms. It might prohibit the government from intentionally suppressing ideas it deems dangerous, but allow regulations that have the incidental effect of favoring some ideas over others.

Of course, a good government should promote flourishing. It is not enough for the government to abstain from censorship and other especially damaging practices. Those who regard rights as *categorical prohibitions* do not deny this obvious truth. They maintain, however, that the Constitution provides for flourishing by establishing competent legislatures rather than by defining rights. A well-constituted legislature will pursue optimal flourishing effectively; constitutional rights, conceived as *categorical prohibitions*, will prevent that legislature from turning its considerable powers to certain tempting (but illegitimate) purposes.

Copyright's critics implicitly assume an *optimal flourishing* conception of Free Speech rights.⁴⁶ Copyright's restrictions upon speech are incidental in character: they arise not out of a scheme designed to suppress a particular viewpoint or subject-matter, but out of laws designed to serve other interests (namely, to encourage expression by establishing a system of property rights in it). These purposes are legitimate and valuable; if copyright offends the First Amendment, it does so because the net balance of benefits and harms to expressive activity is sub-optimal.

As applied to copyright, the *optimal flourishing* conception may broaden the scope of judicially enforceable First Amendment rights. But the conception need not expand rights. Under it, the crucial question is always (and simply) whether a challenged regulation of speech has a net beneficial impact on expressive activity. Suppressing the speech of some people might actually enhance the expressive activity of others. That, in fact, is the lesson that Rebecca Tushnet draws from her analysis of copyright's constitutionality. She believes that the best way to reconcile

^{46.} Such a perspective is manifest in, for example, Erwin Chemerinsky's claim that "The First Amendment seeks to maximize the dissemination of information." Chemerinsky, *supra* note 30, at 83. I do not believe that is so; the First Amendment seeks to eliminate certain pernicious governmental barriers to the dissemination of information, not to maximize information flow.

copyright with free speech is through an analysis of the net impact of copyright on expressive activity, and she recommends transporting that approach to other First Amendment topics, such as the regulation of campaign finance and pornography.⁴⁷ In those domains, the net-impact analysis might permit more regulation of speech than is currently permitted by First Amendment doctrine.

The distinction between optimal flourishing and categorical prohibitions is not special to Free Speech law. Lawrence G. Sager and I have applied a similar distinction to analyze Free Exercise law and constitutional rights more generally.⁴⁸ The choice between the two conceptions of rights is a large one, and there is something to be said on both sides of the issue. For the moment, I want to make only three observations about the issue. First, the structure of Free Speech law is more consistent with the *categorical prohibitions* conception of rights. In general, incidental burdens on speech are governed by the relatively toothless O'Brien test. Free Speech doctrine becomes demanding only when censorship, or some other distinctive vice of government is in play. Second, the current treatment of copyright law is not anomalous; on the contrary, it is perfectly consistent with the larger themes of Free Speech doctrine. Copyright law gets minimal First Amendment scrutiny because it is not censorious. Third, even if one finds the optimal *flourishing* conception otherwise attractive, it will be difficult for judges to implement. The net effect of any given law on speech will often be complex and unpredictable.⁴⁹ A jurisprudence of *categorical prohibitions* will, to be sure, present challenges of its own, but, in my view, these challenges are likely to be more tractable for courts than those presented by a jurisprudence of *optimal flourishing*.⁵⁰

^{47.} Tushnet, *supra* note 2, at 37-44.

^{48.} Christopher L. Eisgruber & Lawrence G. Sager, *The Vulnerability of Conscience: The Constitutional Basis for Protecting Religious Conduct*, 61 U. CHI. L. REV. 1245, 1254-70, 1282-91 (1994) (distinguishing between "unimpaired flourishing" and "equal regard"); Christopher L. Eisgruber & Lawrence G. Sager, *Religious Liberty and the Moral Structure of Constitutional Rights*, 6 LEGAL THEORY 253 (2000) (generalizing the contrast between these two ways of conceptualizing religious freedom). *See also* Lawrence G. Sager, *Of Tiers of Scrutiny and Time Travel: A Reply to Dean Sullivan*, 90 CAL. L. REV. 819, 822-23 (2002) (commenting on the "categorical" character of Equal Protection norms).

^{49.} For example, strong copyright laws may benefit established publishers and broadcasters at the expense of newer, smaller firms, but it is not clear whether this result is good or bad from the standpoint of expressive flourishing: many people may value the informational products of established firms more highly than the products of newer ones.

^{50.} I discuss the limits of judicial competence in CHRISTOPHER L. EISGRUBER, CONSTITUTIONAL SELF-GOVERNMENT 168-204 (2001) and Christopher L. Eisgruber, *Constitutional Self-Government and Judicial Review: A Reply to Five Critics*, 37 U.S.F. L. REV. 115, 180-88 (2002).

IV. CONCLUSION

Copyright law is unfamiliar terrain for me, and so I offer the ideas in this essay with some trepidation. My tentative conclusion, however, is that copyright's contemporary critics have exaggerated the tensions between copyright and First Amendment doctrine. Much Free Speech doctrine is concerned, implicitly or explicitly, with censorship: that is, with government efforts to suppress the expression of ideas it deems dangerous. Most laws that trigger heightened First Amendment scrutiny involve at least the risk of government censorship. With copyright, that risk is low. For that reason, it is not surprising that First Amendment doctrine has expressed so little concern about copyright laws. It is possible, of course, to argue that we would be better off if courts scrutinized copyright law more aggressively. But it seems to me an error to suppose that copyright restrictions are inconsistent with the basic principles of Free Speech doctrine as it now stands.

JUDICIAL REVIEW AND THE QUEST TO KEEP COPYRIGHT PURE

THOMAS B. NACHBAR^{*}

American copyright law is under pressure. The history of copyright in the United States is a story of repeated success by copyright owners in obtaining from Congress expansions in both the scope and duration of copyright. For instance, in response to lobbying by copyright owners, Congress has expanded the term of copyright from a maximum of 28 years in 1790 to the life of the author plus seventy years in 1998. In the twenty-two years from 1976 to 1998, Congress lengthened the duration of copyright by twenty years, a pace that, if maintained, will result in nearly perpetual copyrights. But politics and lobbying are not the only ways to bring about changes in copyright law. Recognizing that the political process offers little hope of curtailing the growth of copyright, opponents of copyright's expansion have turned to constitutional litigation in an effort to trump politics as a source of American copyright policy.¹ Their claim is that the copyright policies embodied in the Constitution - and enforced by courts - represent a better vision of copyright law than what is currently being produced by the federal legislative process.

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^{1.} See, e.g., Eldred v. Ashcroft, 123 S. Ct. 769 (2003); Golan v. Ashcroft, No. 01-CV-1854 (D. Colo. filed Sept. 19, 2001). On the phenomenon of seeking to constitutionalize copyright, see Mark A. Lemley, *The Constitutionalization of Technology Law*, 15 BERKELEY TECH. L.J. 529, 533 (2000) ("If you can persuade a court that what Congress has done is unconstitutional, all the campaign contributions in the world are unlikely to help your opponents."); Paul M. Schwartz & Michael Treanor, Eldred *and* Lochner: *Copyright Term Extension and Intellectual Property as Constitutional Property*, 112 YALE L.J. 2331, 2390 (2003) (characterizing recent constitutional challenges to intellectual property statutes as attempts to "constitutionalize a particular vision of intellectual property").

These attempts to constitutionalize copyright law are misguided in both form and substance. Attempts to make the judiciary the guardian of copyright policy fail to acknowledge that judicial intervention in the legislative process can be justified only in narrow circumstances and that the making of copyright policy is not one of them. Not only are judges ill suited to making economic and political judgments about copyright, but the only guide they have for making those judgments – the Copyright Clause of the Constitution – has painfully little to say about how to formulate good, modern copyright policy. Although the Court's recent decision in *Eldred v. Ashcroft* is unlikely to be popular among commentators seeking to rein in America's overgrown copyright protections, the case is a cause for celebration, not consternation, that the Court has decided to leave to Congress the task of making American copyright policy.

I proceed by laying out, in section I, the context for the challenge to Congress's copyright power made in *Eldred v. Ashcroft*. Section II begins with a brief description of the different ambiguities presented by challenges based on the language in the Copyright Clause, particularly the portion of the Clause exhorting Congress to "promote ... Progress" before continuing on to explain what cases making Copyright Clause challenges, such as *Eldred*, are not: Such cases raise none of the concerns that the Court and commentators have recognized as justifying the displacement of representative policymaking by rigorous judicial review.² After establishing the negative in section II, I attempt in section III to explain what is at stake in such cases, and, using the Court's analysis in Feist Publications, Inc. v. Rural Telephone Service Co.³ as an example, to demonstrate why the Court should avoid resolving the disputes presented in cases like *Eldred*. Far from requiring aggressive protection against congressional overreaching, copyright laws deserve the most deferential standard of judicial review conceivable, a standard I define and defend in section IV.

I. SOURCES OF AMERICAN COPYRIGHT LAW

Copyright protection has been the subject of legislation in the United States for as long as there has been a United States. Under the Articles of Confederation, all of the States but one enacted general

^{2.} See generally Jane C. Ginsburg, "No Sweat"? Copyright and Other Protection of Works of Information After Feist v. Rural Telephone, 92 COLUM. L. REV. 338, 375 (1992) (distinguishing between congressional interpretation of portions of the Constitution bearing on separation of powers or individual rights from congressional interpretation of the Copyright Clause).

^{3. 499} U.S. 340 (1991).

copyright laws.⁴ Copyright was important enough to receive specific attention at the Federal Convention of 1787 in its half of the Patent and Copyright Clause, which enumerated Congress's power to grant authors exclusive rights to their writings,⁵ and Congress enacted the first federal copyright statute during its very first session.⁶ But Congress did not stop there. Congress has, at the behest of copyright owners, repeatedly expanded the reach of copyright law over time.

The justifications offered by those seeking extensions of the copyright term have generally involved the need to provide compensation to authors, frequently with an emphasis on the author's family. Over the last 200 years, Congress has expanded copyright in response to calls from authors seeking to provide for their spouses,⁷ then their children,⁸ and eventually their grandchildren.⁹ But the hearings that eventually led to

7. In response to the 1831 Copyright Act's extension of the initial term of copyright from 14 to 28 years, Noah Webster wrote: "This law will add much to the value of my property, and I cannot but hope I may now make dispositions of copyright which will make me comfortable during the remainder of my life, and secure to Mrs. Webster, if she should survive me, a decent independence." Letter from Noah Webster to William Chauncey Fowler (Jan. 29, 1831) in LETTERS OF NOAH WEBSTER 424 (1953). The 1790 Act had made provision for renewal of the original 14-year term but had vested the renewal right only if the "author or authors, or any of them, be living, and a citizen... of these United States, or resident therein" at the expiration of the first term. 1790 Act § 1. Thus, if the author died before renewal, the copyright lapsed. The 1831 Act gave the renewal power not only to the living author, but also to a deceased author's "widow, or child, or children, either or all then living," which may have explained Webster's reference to the benefit of the act to his wife's well-being. *See* Act of Feb. 3, 1831, ch. 16, § 2, 4 Stat. 436 (repealed 1870).

8. Appearing before Congress to support a life-plus-fifty-year term, Samuel Clemens (aka Mark Twain) testified:

I like the ... extension, because that benefits my two daughters, who are not as competent to earn a living as I am, because I have carefully raised them as young ladies, who don't know anything and can't do anything. So I hope Congress will extend to them that charity which they have failed to get from me.

Arguments Before the Committees on Patents on S. 6330 and H.R. 19853, 59th Cong. 117 (1906) (statement of Samuel L. Clemens). Congress did extend the duration of copyright, but only to 56 years from the date of publication. Act of Mar. 4, 1909, ch. 320, 35 Stat. 1075 (repealed 1947).

9. Seeking to extend the duration of copyright by an additional twenty years beyond the 1976 Act's life-plus-fifty year term, Marilyn Bergman testified that the "[e]xtension of copyright term will serve to encourage the tens of thousands of music creators who struggle to earn a living in this highly competitive business, and for whom the prospect of leaving an asset of their own making to their children and grandchildren is a powerful incentive." *Copyright Term, Film Labeling, and Film Preservation Legislation: Hearings on H.R. 989, H.R. 1248, and H.R. 1734 before the Subcommittee on Courts and Intellectual Property of the House*

^{4.} See THORVALD SOLBERG, COPYRIGHT ENACTMENTS OF THE UNITED STATES 1793-1906, at 11-19 (1906).

^{5.} The Patent and Copyright Clause gives Congress the power "To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries." U.S. CONST. art. I, § 8, cl. 8.

^{6.} Act of May 31, 1790, ch. 15, 1 Stat. 124 (repealed 1802).

[Vol. 2

A public domain work is an orphan. No question about that. No one is responsible for its future life. But everyone exploits its use until that time certain when it becomes soiled and haggard and barren of all its former virtues. Who then – who then will invest the funds required to renovate it and to nourish its future when nobody owns it^{21}

Jack Valenti made this argument with respect to older motion pictures. Without the incentive of copyright protection, the theory goes, no one will undertake the expensive task of preserving and distributing celluloid films, resulting in their loss to society. Either Congress bought one of the many policy rationales offered for the CTEA – the legislation was also justified as harmonizing American and international copyright protection and as providing benefits for American copyright owners in connection with use of their works abroad¹² – or the politics favoring passage were just too strong,¹³ because Congress passed the CTEA's twenty-year extension and applied that extension to the previously existing works about which Mr. Valenti had testified, again changing American copyright law.

But not all changes to copyright take place in Congress. Just as lobbyists have gone to Congress seeking to change the reach of copyright protection, litigants have gone to the courts, also hoping to alter the face of American copyright law. One of the most significant judicial changes to copyright happened in 1991, when the Supreme Court decided in *Feist Publications, Inc. v. Rural Telephone Service Co.* that facts are outside the scope of copyright.¹⁴

work itself.

Comm. on the Judiciary, 104th Cong. 57 (1995) (statement of Marilyn Bergman, President, ASCAP).

^{10.} Pub. L. No. 105-298, 112 Stat. 2827 (1998) (codified in relevant part at 17 U.S.C. §§ 301 to 304).

^{11.} Copyright Term, Film Labeling, and Film Preservation Legislation: Hearings on H.R. 989, H.R. 1248, and H.R. 1734 before the Subcommittee on Courts and Intellectual Property of the House Comm. on the Judiciary, 104th Cong. 52 (1995) (statement of Jack Valenti, President of the Motion Picture Association of America).

^{12.} Eldred v. Ashcroft, 123 S. Ct. 769, 781-82 (2003).

^{13.} The CTEA also enlarges the rights of storeowners to play televisions and radios in their establishments, a provision disfavored by the proponents of term extension but accepted as a matter of compromise. *See* Dennis S. Karjala, *Judicial Review of Copyright Term Extension Legislation*, 36 LOY. L.A. L. REV. 199, 204-05 & n.21 (2002).

^{14. 499} U.S. 340 (1991).

Feist Publications was an independent publisher of "area-wide" telephone directories, directories covering more than one telephone service area. Rural was a local telephone company that published its own directory for the service area it covered. To publish its directory, Feist copied names, telephone numbers, and some address information out of Rural's directory. Because Feist admitted to copying the information from Rural's directory, the only question was whether the subscriber information was copyrightable.¹⁵

Section 102(a) of the Copyright Act limits copyright protection to "original works of authorship,"¹⁶ meaning that the names and telephone numbers in Rural's directory could not be copyrightable unless they were "original." In the years leading up to the decision in *Feist*, the circuits had split over whether "originality," in copyright parlance, permitted protection against the copying of facts based merely on the labor expended by the author in collecting those facts. *Feist* rejected this view, commonly referred to as the "sweat of the brow" doctrine, and instead insisted that originality required not only that the work originate with the author, but also that the work be the product of the author's creativity. Rural may have *discovered* the facts contained in its directory, but Rural did not *create* them, and they were therefore not copyrightable.¹⁷ After *Feist*, it became clear that the standard for copyrightability was not merely originality, but *creative* originality.

The case could have been an unremarkable resolution of a circuit split but for the Court's decision to ground its holding not only in the copyright statute, but also in the Constitution. "Originality," the Court explained, "is a *constitutional* requirement."¹⁸ Originality is inherent in the Copyright Clause's use of the term "writings" (a widely accepted rule since the 1879 *Trade-Mark Cases*), and because facts cannot be original (by the analysis above), copyright protection for facts is unconstitutional.¹⁹ It was not enough to say that Congress *did not* extend protection to facts; Congress *could not* extend protection to facts.²⁰

The Court elaborated, explaining how denying protection to facts was also necessary to fulfill the "primary objective" of the Copyright

^{15.} Id. at 342-44.

^{16. 17} U.S.C. § 102(a).

^{17.} Feist, 499 U.S. at 347-48.

^{18.} Id. at 346 (emphasis added).

^{19.} Id.

^{20.} The Court's zeal is demonstrated by its repetition; in *Feist*, the Court cited the constitutional basis for the originality standard "no fewer than thirteen times." Paul Goldstein, *Copyright*, 38 J. COPYRIGHT SOC'Y USA 109, 119 (1991). On the Court's uncharacteristic willingness to reach the constitutional issue, see Ginsburg, *supra* note 2, at 378-79, 382 n.207.

Clause: "[t]o promote the Progress of Science and useful Arts."²¹ Denying protection to facts leaves them available for future authors to use in creating their own works, which furthers progress. "This result is neither unfair nor unfortunate. It is the means by which copyright advances the progress of science and art."²²

The Court's conclusion that promoting progress requires that facts be unprotected by copyright is a sweeping policy statement, one on which many reasonable minds differ.²³ In 1991, the Supreme Court, whether it recognized it or not, made profound copyright policy. They better have gotten it right, because *Feist* is a matter of constitutional law now – a Supreme Court decision that can be undone only by another Supreme Court decision or by constitutional amendment. *Feisi*'s requirement of creative originality is a part of American copyright law that Congress cannot change.

Perhaps encouraged by the Supreme Court's willingness in *Feist* to engage in constitutional policymaking, several plaintiffs, including Eric Eldred, filed suit seeking to strike down the CTEA's extension of the copyright term for works already in existence, both as an improper exercise of the copyright power and as a violation of the First Amendment.²⁴ The heart of their Copyright Clause challenge was that extensions to subsisting works do not promote progress, a requirement embodied in the Progress Phrase.²⁵

^{21.} *Feist*, 499 U.S. at 349 (quoting U.S. CONST. art. I, § 8, cl. 8). For simplicity, I shall refer to this part of the grant listed in clause 8 of section 8 as the "Progress Phrase."

There are many opinions among commentators about how to parse the text of the Progress Phrase and whether copyright should promote the progress of "Science," "Useful Arts," or both, and even some discussion about what "Science" might mean. *E.g.* Lawrence B. Solum, *Congress's Power to Promote the Progress of Science:* Eldred v. Ashcroft, 36 LOY. L.A. L. REV. 1, 44-54 (2002). In any event, it's clear that at the very minimum that what must be promoted is "progress," and no further specification seems relevant to understanding the aspiration reflected in the phrase. I shall thus confine my rhetoric to the promotion of progress generally.

^{22.} Feist, 499 U.S. at 350.

^{23.} See Victoria Smith Ekstrand, Drawing Swords After Feist: Efforts to Legislate the Database Pirate, 7 COMM. L. & POL'Y 317 (2002) (collecting sources). At the very least, the adoption by the European Union of database protection suggests that there is some social utility in granting such rights. See Directive 96/9/EC of the European Parliament of the Council of 11 March 1996 on the Legal Protection of Databases [1996] O.J. L77 20.

^{24.} Eldred v. Ashcroft, 123 S. Ct. 769, 775 (2003).

^{25.} The petitioners in *Eldred* made four copyright-related claims before the Supreme Court, two of which they styled as stemming from the "limited Times" language of the Copyright Clause. The first argument is that a copyright that is extended after it is created is not for a "limited" time. The Court rejected that argument out of hand, refusing to equate a "limited" copyright term as with "fixed" or "inalterable" one. *Eldred*, 123 S. Ct. at 778. The second argument was that the Progress Phrase informs what a "limited" time may be; on this view a grant that does not promote progress fails the test of the limited times language of the Clause. Br. for Pet'rs at 19, Eldred v. Ashcroft, 123 S. Ct. 769 (2003) (No. 01-618)

The *Eldred* petitioners disputed the supposed benefits of the CTEA, asserting that the act would not actually harmonize American copyright law with international copyright protection.²⁶ As for Jack Valenti's proffered justification for extending the copyright terms of existing works – the incentive to preserve older works – the *Eldred* petitioners countered that copyright term extension for existing works actually *discourages* preservation efforts:

Much of this film is "orphaned" because current copyright holders cannot be identified, and all of it is now decaying because of the unstable properties of nitrate-based film and even so-called "safety" film. [One of the petitioners] restores these old films when they pass into the public domain, but under the CTEA no films will pass into the public domain for 20 years.²⁷

Similarly, other *Eldred* petitioners have

built an archive of public domain movies which will make film available in a digital form to viewers and filmmakers around the world. The technical capacity of this archive is limited only by the number of machines linked to the network.... The copyright

[[]hereinafter *Eldred Petitioners' Brief*]. Regardless of the textual basis, the heart of this claim is that the CTEA's term extensions for existing works do not promote progress and should therefore be invalidated. The Court took this claim to mean that the CTEA should be struck because it does not promote progress, Eldred, 123 S. Ct. at 784, and I will discuss it as such. Their third Copyright Clause claim was that the CTEA, by failing to extract anything in return for its added protection, violates the Copyright Clause's requirement that all grants be in the form of a quid pro quo, a claim the Court handled by "demur[ring]" to the petitioners' claim that the Clause might require an exchange, but finding any requirement of an exchange satisfied, id. at 786, and distinguishing the Court's stronger exchange-oriented statements in the patent context, id. at 786-87. Finally, the petitioners argued that an extension of copyright in an existing work violates the Copyright Clause's requirement of originality as announced in Feist. The Court responded without even addressing the logic of the argument, merely pointing out instead that the case the petitioners cited for the originality requirement, Feist, had nothing to do with duration. Id. at 784. In addition to their enumerated claims, the Court treated the case as addressing whether the CTEA is "a rational exercise of the legislative authority conferred by the Copyright Clause," which the Court found was satisfied by the same justifications as Progress Phrase challenge: "international concerns" and by responding to changing markets by providing an incentive to restore and release old films. Id. at 782, 785. The Progress Phrase claim was the petitioners' strongest, id. at 784, and I believe it is this claim that raises the most interesting questions about how the Court should review copyright laws for compliance with the Copyright Clause. While I do not wish to diminish the importance of the petitioners' First Amendment claims, my inquiry is limited to the Copyright Clause.

^{26.} Eldred Petitioners' Brief, supra note 25, at 43-44.

^{27.} Id. at 4 (citations omitted).

owners of many of these films cannot be identified. Their work thus cannot be made available on the Internet.²⁸

When a film becomes an "orphan," it seems, is a matter of dispute.

The Court rejected the Progress Phrase challenge by holding that, as demonstrated by historical practice, the extension of copyright in an existing work does not run afoul of the Progress Phrase²⁹ and that, given Congress's stated international and preservation-oriented justifications for the act, there was a "rational basis" for believing that the CTEA promotes progress.³⁰ But the Court consciously refused to question whether extending the term of copyright in order to respond to international increases in copyright terms and to provide an incentive to preserve and distribute older works served "progress" as defined by the Clause.³¹ The Court was willing to engage in rational basis scrutiny to determine whether the means served the stated end, but it would not second-guess Congress's determination of an appropriate end. The Court found the CTEA to be a rational means of furthering progress but let pass Congress's chosen definition of "progress" without specifying the level of review it had applied.

The Court's heavy emphasis in *Eldred* on the historical practice of extending the copyright term for existing works makes the case of uncertain value as a precedent for challenges to more novel forms of regulation, whether promulgated under the Copyright Clause or under other Article I grants of authority.³² I would like to offer a more

32. The battle for the Copyright Clause is not over. Currently pending in federal court in Denver is a case that will provide a much more difficult challenge to a federal copyright law. Golan v. Ashcroft, No. 01-CV-1854 (D. Colo. filed Sept. 19, 2001), challenges both the CTEA (a claim that is likely precluded by the decision in *Eldred*) and the Uruguay Round Agreements Act, § 514, 17 U.S.C. § 104A. Section 104A "restores" copyright to works by foreign authors if the work fell into the public domain in the United States because (i) the author failed to comply with a formality imposed by the Copyright Act, (ii) the work was a sound recording fixed before federal copyright was extended to sound recordings in 1972, or (iii) the author lacked national eligibility. *See* 17 U.S.C. § 104A(a)(1)(A), (h)(6). Such a grant is arguably inconsistent with language in *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 6 (1966), a patent case in which the Supreme Court wrote in dicta that "Congress may not authorize the issuance of patents whose effects are to remove existent knowledge from the public domain, or to restrict free access to materials already available," and there is no similarly pervasive historical practice of granting rights in works that have fallen into public domain. *But see Eldred*, 123 S. Ct. at 787 (some limits relevant to the patent power may not apply with

^{28.} Id. at 6.

^{29.} Eldred, 123 S. Ct. at 785-86.

^{30.} Id. at 785.

^{31.} The Court came closest to addressing the definition of "progress" in its discussion of the petitioners' Progress Phrase claim. *See id.* at 785. Although the Court repeatedly referenced congressional prerogative in choosing the means by which to effectuate the "Copyright Clause's objectives," the Court assiduously avoided any substantive discussion of what it means to "promote the Progress of Science." *Id.*

principled, and generally applicable, analysis of what drove the Court to a display of deference to Congress unseen since United States v. Lopez³³ was decided in 1995 and what the case has to say about the role of constitutional judicial review of federal statutes.

Challenges to copyright legislation based on the Progress Phrase are cases about ambiguity - not just ambiguity in the text itself, but ambiguity over what purpose the text serves in the constitutional order. Those arguing for the use of the Progress Phrase to restrict Congress's power can point to a body of case law suggesting that the Court will aggressively review federal laws for compliance with the Constitution's restrictions on congressional authority, but those who have argued for restrictive judicial review of the copyright power have ignored the basis for the Supreme Court's restrictive approach to interpreting congressional power. When one considers the rationales behind the various justifications for judicial review - including the Rehnquist Court's rediscovery of constitutional limits on Article I powers - it becomes clear that arguments for reading the Copyright Clause restrictively ignore the foundational premises of constitutional judicial review. Rather, calls for reading the Copyright Clause restrictively are merely attempts to employ the rhetoric of constitutional limitation to engage the Court in making socially optimal copyright policy. That the Court should not do so is plain not only as a matter of republican values, but also as a matter of relative competence to make copyright policy. Far from safeguarding constitutional values, challenges based on the Progress Phrase will place modern copyright law at the mercy of a group ill qualified to make modern copyright policy: the Framers.

II. WHAT COPYRIGHT CLAUSE CHALLENGES ARE NOT

A. An Aside on Ambiguity

Recognizing that *Eldred* is a case about constitutional ambiguity is hardly an insight, but it is important to note that the ambiguity at issue in *Eldred* is not primarily a textual one.

equal force to the copyright power); Evans v. Jordan, 8 F. Cas. 872 (C.C.D. Va. 1813) (No. 4,564) aff d 13 U.S. (9 Cranch) 199 (1815) (upholding a private bill extending the duration of a previously expired patent). Sooner or later, the Court will have to decide whether Congress has a completely free hand when it comes to determining whether a particular copyrightrelated goal promotes progress.

On the possibility that Congress could turn to another power, see Thomas B. Nachbar, Intellectual Property and Constitutional Norms, 104 COLUM. L. REV. (forthcoming 2004).

^{33. 514} U.S. 549 (1995).

[Vol. 2

That is not to say that the Copyright Clause is necessarily clear. For example, the phrase "limited Times" is clear in some ways and ambiguous in others. If one is asking whether copyright grants may be perpetual, "limited Times" is clear – they may not. However, if the question is whether the duration of a copyright can be extended after the grant is made, "limited Times" provides a less certain answer.³⁴

Application of the Progress Phrase almost always raises a nice question of textual ambiguity: What is "progress"? That is a question with as many answers as there are opinions,³⁵ but I do not believe that it is the important ambiguity at issue in cases challenging copyright laws for failure to promote progress. Indeed, my only point about the word "progress" (discussed more fully below) is that its inherent ambiguity cannot possibly be a reason for reading the Copyright Clause restrictively. The one point on which the Copyright Clause seems to be free of ambiguity is the question at the center of the disagreement in *Eldred*. There can be no general debate over whether the Clause means that any system of exclusive rights established pursuant to the Clause must promote progress. It hardly takes sophisticated textual analysis to determine that the promotion of progress is part of what the Clause is about.³⁷

Rather, the more fundamental ambiguity underlying *Eldred* stems from the constitutional implications of a charge that Congress has failed to abide by the restriction that its grants of exclusive rights promote progress.³⁸ In this regard, cases challenging copyright legislation on the basis of non-compliance with the Progress Phrase are very similar to the cases challenging Congress's power under the Commerce Clause. Those

^{34.} *Eldred*, 123 S. Ct. at 778 (comparing two meanings of limited: fixed and inalterable or restrained and circumscribed).

^{35.} See, e.g., Malla Pollack, What Is Congress Supposed to Promote?: Defining "Progress" in Article I, Section 8, Clause 8 of the United States Constitution, Or Introducing The Progress Clause, 80 NEB. L. REV. 754, 755, 794-95 (2001) (defining "progress" as used in the Progress Phrase as "spread,' i.e. diffusion, distribution" in favor of other potential definitions, such as "advancement").

^{36.} Mitchell Bros. Film Group v. Cinema Adult Theater, 604 F.2d 852, 859 (5th Cir. 1979) (citing Jeremy Phillips, *Copyright in Obscene Works: Some British and American Problems*, 6 ANGLO-AM. L. REV. 138, 165-66 (1977)).

^{37.} See Solum, supra note 21, at 10-20.

^{38.} The D.C. Circuit, for example, decided the Progress Phrase question by applying circuit precedent to the effect that the Progress Phrase provides no enforceable constraint on Congress's actions. See Eldred, 123 S. Ct. at 777. See also Graeme W. Austin, Does the Copyright Clause Mandate Isolationism?, 26 COLUM. J.L. & ARTS 17, 57 (2002) (at issue in cases like Eldred are questions about "the role of the Court in the development of domestic and international copyright policy").

cases are less about the meaning of the Commerce Clause's limiting text - that Congress may only regulate "Commerce with foreign Nations, and among the several States, and with the Indian Tribes"39 - than they are about how the limitations contained in the Clause will be enforced.⁴⁰ The meaning of the Commerce Clause was not at issue in either of the two most recent Commerce Clause cases; the dispute in both was about how much leeway the Court would give Congress in implementing the Clause's charge to regulate interstate commerce.⁴¹ Challenges based on the Copyright Clause's Progress Phrase raise the same question in a different context: How much leeway should the Court give Congress in implementing the Clause's grant of authority? How actively should the Court review copyright legislation for compliance with the Progress Phrase? It's one thing to say that copyright legislation should promote progress; it's quite another to say that a federal court should review copyright legislation to decide whether it promotes the court's definition of progress and strike legislation that does not.⁴² Defining what role the judiciary should have in policing Congress's exercise of the copyright power requires more than a textual argument about the meaning of the words in the Copyright Clause.⁴³ What is needed is a broader theory that explains when judges adjudicating constitutional cases should negate the results of the legislative process.

B. Justifications for Judicial Review

There are many powerful justifications available to support rigorous judicial review of legislation for consistency with the Constitution. Nevertheless, all theoretical justifications for judicial review begin with a disadvantage: the rather straightforward intuition that in a republic such as the United States it is the role of the legislature, not judges, to make

43

^{39.} U.S. CONST. art. I, § 8, cl. 3.

^{40.} Compare United States v. Lopez, 514 U.S. 549, 559 (1995) (If the statute "is to be sustained, it must be... as a regulation of an activity that substantially affects interstate commerce."), with id. at 631 (Breyer, J., dissenting) ("Upholding this legislation would do no more than simply recognize that Congress had a 'rational basis' for finding a significant connection between guns in or near schools and ... the interstate and foreign commerce they threaten.").

^{41.} See id. at 615-19 (Breyer, J., dissenting) (discussing the degree of deference afforded to Congress, but not disputing the majority's definition of commerce); United States v. Morrison, 529 U.S. 598, 647 (2000) (Souter, J., dissenting) (arguing that, under the Framers' design, "politics, not judicial review, should mediate between state and national interests"); Karjala, *supra* note 13, at 241.

^{42.} Austin, *supra* note 38, at 44-45 (suggesting that the Progress Phrase provides a reason for congressional action but perhaps not a judicially enforceable constraint on it).

^{43.} See Richard A. Epstein, The Dubious Constitutionally of the Copyright Term Extension Act, 36 LOY. L.A. L. REV. 123, 128-29 (2002).

policy. For unelected judges to discard the product of representative lawmaking and replace it with their own judgment about what the law should be is at least superficially undemocratic. The concern is captured nicely by the label applied to the problem in 1962 by Alexander Bickel: the counter-majoritarian difficulty.⁴⁴

In the face of the counter-majoritarian difficulty, the case for active judicial review has been made most commonly in a few broad (and frequently overlapping) areas. The first three track roughly the three categories described by the Supreme Court in footnote 4 of *United States v. Carolene Products, Inc.*:

There may be narrower scope for operation of the presumption of constitutionality when legislation appears on its face to be within a specific prohibition of the Constitution, such as those of the first ten Amendments, which are deemed equally specific when held to be embraced within the Fourteenth.

It is unnecessary to consider now whether legislation which restricts those political processes which can ordinarily be expected to bring about repeal of undesirable legislation, is to be subjected to more exacting judicial scrutiny under the general prohibitions of the Fourteenth Amendment than are most other types of legislation. On restrictions upon the right to vote, see ...; on restraints upon the dissemination of information, see ...; on interferences with political organizations, see ...; as to prohibition of peaceable assembly, see

Nor need we enquire whether similar considerations enter into the review of statutes directed at particular religious, . . . or national, . . . or racial minorities. . . . [W]hether prejudice against discrete and insular minorities may be a special condition, which tends seriously to curtail the operation of those political processes ordinarily to be relied upon to protect minorities, and which may call for a correspondingly more searching judicial inquiry.⁴⁵

^{44.} ALEXANDER M. BICKEL, THE LEAST DANGEROUS BRANCH: THE SUPREME COURT AT THE BAR OF POLITICS 16-17 (2d ed. 1986). Despite decades of treatments and responses, the counter-majoritarian difficulty's vitality is unquestionable. It presents, arguably, the central question facing every theory of judicial review. *See* Suzanna Sherry, *Too Clever by Half: The Problem with Novelty in Constitutional Law*, 95 NW. L. REV. 921 (2001) ("[O]ne might say that reconciling judicial review and democratic institutions is the goal of almost every major constitutional scholar writing today.").

^{45. 304} U.S. 144, 152-53 n. 4 (1938) (citations omitted). See also Michael B. Gerdes, Comment, Getting Beyond Constitutionally Mandated Originality as a Prerequisite for Federal Copyright Protection, 24 ARIZ. ST. L.J. 1461, 1475 (1992) (suggesting the Court apply a permissive standard of review of the Copyright Clause and citing Carolene Products).

The Rehnquist Court's emphasis on maintaining the constitutional balance of power in the American system accounts for a fourth area of heightened judicial scrutiny.⁴⁶

I would like to suggest that, collectively, the justifications for heightened judicial review break down into four categories of cases, those involving: 1) fundamental rights and principles, 2) attempts by the government to prevent the electorate from exercising political rights, 3) systematic discrimination (most clearly implicated by discrimination by the majority against the minority), and 4) attempts to alter the boundaries and relative power of the various competitors for governmental power in the constitutional system.

One should not take my categories of arguments for judicial review as an attempt to provide a comprehensive taxonomy of theories of judicial review, nor do I mean to endorse the categories I've laid out as equally deserving of rigorous judicial review – my enterprise is descriptive, not normative. Similarly, my list fails to acknowledge theories advocating restrictive approaches to judicial review⁴⁷ and the contributions by commentators to elaborate on these categories (which I will address in modest detail below). Rather, my goal is merely to list the categories of cases that are generally regarded as deserving heightened judicial review. Despite the amount of attention constitutional judicial review has received from courts and commentators over the last several decades, the widely accepted theories supporting expansive judicial review fit roughly within these four categories, albeit with wide variations within them.

And if my groupings are not wholly mistaken, one thing is clear from even cursory consideration: review of legislation for compliance with the Copyright Clause falls within none of them.

C. Copyright and Fundamental Interests

The first category has perhaps received the most attention from commentators inquiring into the proper reach of judicial review. Although Footnote 4 itself refers to "specific prohibition[s] of the Constitution, such as those of the first ten Amendments," many have

On footnote 4 more generally, see William N. Eskridge, Jr., *Some Effects of Identity-Based Social Movements on Constitutional Law in the Twentieth Century*, 100 MICH L. REV. 2062, 2378 (2002) (discussing the ramifications of footnote 4 and collecting sources thereon).

^{46.} See William W. Buzbee & Robert A. Schapiro, Legislative Record Review, 54 STAN. L. REV. 87, 137-38 (2001); Keith E. Whittington, Taking What They Give Us: Explaining the Court's Federalism Offensive, 51 DUKE L.J. 477 (2001) (following the development of the Court's federalism jurisprudence in recent years).

^{47.} E.g., JEREMY WALDRON, LAW AND DISAGREEMENT (1999).

argued that the category is more appropriately viewed as including cases involving basic or fundamental liberties. Alexander Bickel's own response to the counter-majoritarian difficulty, for instance, was not so much to justify judicial review as to limit its reach, in part by limiting its application to matters of principle and defining "principle" narrowly. Judicial review, he wrote,

extends over a broad range of public issues in our system... Ranging as widely as it has and as, on the premises I accept, there is no reason it should not, judicial review brings principle to bear on the operations of government. By "principle" is meant general propositions...; organizing ideas of universal validity in the given universe of a culture and a place, ideas that are often grounded in ethical and moral presuppositions.⁴⁸

Others have elaborated on the moral and fundamental basis for intervention in some circumstances. My co-panelist, Christopher Eisgruber argues that the major advantage judges have over the legislature or electorate is their ability to remain *impartial* – the quality of responding to "the interests and opinions of all the people, rather than merely serving the majority or some other faction" 49 – when considering important matters of morality. According to Professor Eisgruber, matters of constitutional morality are likely to be implicated when the scope of individual civil rights (such as the right to the free exercise of religion or equal protection of the laws)⁵⁰ and fundamental liberties (as embodied in the doctrine of substantive due process) are in question.⁵¹ Bruce Ackerman has also argued for an expansive approach to the first category, contending that judges should apply heightened review in order to protect, as a matter of "higher law," "basic rights" that he claims go beyond those enumerated in the Bill of Rights.⁵²

^{48.} BICKEL, *supra* note 44, at 199. *See also* Herbert Wechsler, *Toward Neutral Principles of Constitutional Law*, 73 HARV. L. REV. 1, 16 (1959) (arguing that in order to be legitimate, the Court's decisions must be justified by reference to "neutral principles"). Bickel was unsatisfied with Wechsler's "neutral principles": "Which values, among adequately neutral and general ones, qualify as sufficiently important or fundamental . . . to be vindicated by the Court against other values affirmed by legislative acts?" BICKEL, *supra* note 44, at 55. On Bickel's response to Wechsler, see G. Edward White, *The Arrival of History in Constitutional Scholarship*, 88 VA. L. REV. 485, 547 (2002).

^{49.} CHRISTOPHER L. EISGRUBER, CONSTITUTIONAL SELF-GOVERNMENT (2001). On "impartiality" as he uses it, see *id.* at 19.

^{50.} Id. at 52.

^{51.} Id. at 157-61.

^{52.} Bruce A. Ackerman, *Beyond* Carolene Products, 98 HARV. L. REV. 713, 743-44 (1985); *see also* EISGRUBER, *supra* note 49, at 115-20 (on the importance of "Unenumerated Rights"). Ronald Dworkin's "moral reading" of the Constitution implicates similarly fundamental principles, although citation to Dworkin itself demonstrates the overlap of the

But neither a more restrictive approach focusing on enumerated constitutional rights nor a broader view of implied fundamental interests supports application of a heightened standard when reviewing legislation for consistency with the Copyright Clause. Copyright law certainly has the potential to affect interests that might be characterized as fundamental. But that is not to say that the application of anything as grand as fundamental principles can resolve any of the ambiguities present in the Copyright Clause. Nor is consideration of the fundamental interests affected by the Copyright Clause helpful in uncovering its meaning.

Some commentators have argued that a permissive reading of the Copyright Clause is inconsistent with the Framers' general disdain for monopolies.⁵³ Even if that were true, it's hard to place "the right to be free from monopolies" among the kinds of fundamental interests typically protected by courts through a heightened standard of judicial review. The right to be free from monopolies is a right with purely economic consequences, and not since the *Lochner* Era have economic rights *as economic rights* received any heightened form of constitutional judicial protection. While regulation of some activities that are primarily economic – such as commercial speech – is subject to heightened scrutiny, that is so not because of the economic impact of the regulation but rather because of the direct effect of the regulation on some more fundamental interest.⁵⁴ Indeed, the Court made it clear when

categories. *See* RONALD DWORKIN, FREEDOM'S LAW: THE MORAL READING OF THE AMERICAN CONSTITUTION 1 (1996) (listing as the subjects of his discussion, "abortion, affirmative action, pornography, race, homosexuality, euthanasia, and free speech"), *id.* at 7-12 (describing his theory of moral reading).

^{53.} See, e.g., Eldred Petitioners' Brief, supra note 25, at 23-27; Wendy J. Gordon, Authors, Publishers, and Public Goods: Trading Gold for Dross, 36 LOY. L.A. L. REV. 159, 172-73 (2002); Marci A. Hamilton, Copyright Duration Extension and the Dark Heart of Copyright, 14 CARDOZO ARTS & ENT. L.J. 655, 659-60 (1996); Paul J. Heald & Suzanna Sherry, Implied Limits on the Legislative Power: The Intellectual Property Clause as an Absolute Constraint on Congress, 2000 U. ILL. L. REV. 1119, 1143-46; Robert Patrick Merges & Glenn Harlan Reynolds, The Proper Scope of the Copyright and Patent Power, 37 HARV. J. ON LEGIS. 45, 56-57 (2000); Tyler T. Ochoa & Mark Rose, The Anti-Monopoly Origins of the Patent and Copyright Clause, 84 J. PAT. & TRADEMARK OFF. SOCY 909 (2002). See also Lawrence Lessig, Copyright's First Amendment, 48 UCLA L. REV. 1057, 1062 (2001) ("The great evil in the Framers' mind, second only to the great evil of centralized, monarchical government, was the evil of state-sanctioned monopoly.").

^{54.} First Nat'l Bank of Boston v. Bellotti, 435 U.S. 765, 783 (1978) ("A commercial advertisement is constitutionally protected not so much because it pertains to the seller's business as because it furthers the societal interest in the 'free flow of commercial information.") (quoting Va. Bd. of Pharmacy v. Va. Citizens Consumer Council, Inc., 425 U.S. 748, 764 (1976)). *Cf.* Glickman v. Wileman Bros. & Elliott, Inc., 521 U.S. 457, 474 (1997) (government's use of assessments paid by growers for advertising does not violate the speech rights of the growers paying the assessment).

overturning *Lochner* that the right to engage in any particular economic activity is not so fundamental as to warrant heightened scrutiny.⁵⁵

The most likely candidate for a fundamental interest affected by copyright is the interest in free speech. Although copyright can affect speech interests by increasing the cost of speech – at least speech that would amount to infringement of a copyright⁵⁶ – it is difficult to come up with either a fundamental principle that necessarily determines the point at which the increased cost of speech is intolerable or a fundamental liberty to speak without paying the person whose speech one is copying.⁵⁷ Indeed, the wide acceptance of copyright by the framing generation itself suggests that the two interests are far from inconsistent.⁵⁸

Even if one assumes that the Free Speech Clause of the First Amendment represents a fundamental principle in tension with copyright,⁵⁹ it is hard to glean any sort of specific limit on copyright based on First Amendment protections.⁶⁰ How long a duration, exactly,

59. See Yochai Benkler, Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain, 74 N.Y.U. L. REV. 354 (1999) (autonomy-enhancing nature of the First Amendment as constraint on the ability to grant property rights in information) [hereinafter, Benkler, Free as the Air]; Dan T. Coenen & Paul J. Heald, Ends/Means Analysis in Copyright Law: Eldred v. Ashcroft in One Act, 36 LOY. L.A. L. REV. 99, 114 (2002) (Copyright Clause and Free Speech Clause have "shared purposes"); Neil Weinstock Netanel, Locating Copyright Within the First Amendment Skein, 54 STAN. L. REV. 1 (2001) (describing changes in both copyright doctrine and First Amendment doctrine that bring copyright and the First Amendment more clearly into conflict); Jed Rubenfeld, The Freedom of Imagination, Copyright's Constitutionality, 112 YALE L.J. 1, 4 (2002) (describing a First Amendment "freedom of imagination," which prohibits restrictions on the ability to imagine or communicate the product of one's imagination). See generally Robert Post, Reconciling Theory and Doctrine in First Amendment Jurisprudence, 88 CAL. L. REV. 2353 (2000) (collecting theories of the First Amendment); Rubenfeld, supra, at 30 (discussing "Giant-Sized First Amendment Theories").

60. See Eisgruber, supra note 57, at 29; Marci A. Hamilton, A Response to Professor Benkler, 15 BERKELEY. TECH. L.J. 605, 610-12 (1999). Cf. Benkler, supra note 56, at 555:

The analysis that applies to the Copyright Act is suggestive of the relationship between the First Amendment and the Intellectual Property Clause. The constraints on laws imposed by the Intellectual Property Clause – the originality requirement, the exclusion of materials already in the public domain, and the express time limitation – are inherent constraints on the tension between property rights in information enacted within the confines of that clause, and the values of free speech.") (footnote omitted)

Id; L. Ray Patterson, *Free Speech, Copyright, and Fair Use*, 40 VAND. L. REV. 1, 36 (1987) (describing the "three free speech constraints implicit in copyright – publication, no copyright

^{55.} United States v. Carolene Prods., Inc., 304 U.S. 144, 152 (1938).

^{56.} See Yochai Benkler, Constitutional Bounds of Database Protection: The Role of Judicial Review in the Creation and Definition of Private Rights in Information, 15 BERKELEY TECH. L.J. 535, 553 (2000).

^{57.} Christopher L. Eisgruber, *Censorship, Copyright, and Free Speech: Some Tentative Skepticism About the Campaign to Impose First Amendment Restrictions on Copyright Law,* 2 J. ON TELECOMM. & HIGH TECH. L. 17, 28-29 (2003).

^{58.} Eldred v. Ashcroft, 123 S. Ct. 769, 774 (2003).

is the maximum permissible in order to serve the speech interests represented by the First Amendment? Is the granting of exclusive rights to facts or ideas inconsistent with the First Amendment? If so, how can trade secret law be constitutional?⁶¹

This is not to say that legislation passed pursuant to the Copyright Clause should be immune from First Amendment scrutiny. Rather, my point is that there are no "organizing ideas of universal validity... grounded in ethical and moral presuppositions"⁶² underlying *any particular definition* of the copyright power described in the Copyright Clause. A copyright statute may fail First Amendment scrutiny, but that only means that, as a matter of constitutional law, Congress's copyright power is limited by the First Amendment's requirement that Congress not overly burden speech. It is another thing to say that the scope of the Copyright Clause itself can only be determined after one considers the relevant fundamental principles embodied in the First Amendment (if any there are).

Why does it matter? After all, a copyright law that violates an enforceable free speech principle will be struck regardless of whether the violation is identified as a violation of the First Amendment or as being beyond the copyright power. But the distinction is critical because, while free speech *principles* might be fundamental, First Amendment *doctrine* has never been absolute.⁶³ As the Court has expanded cognizable free speech interests, it has developed a number of devices to prevent them from overwhelming all others. Thus, in cases involving content-neutral legislation, the Court has adopted a rough balancing test to assure that the government interest being furthered is substantial and that speech rights are not being curtailed more than necessary to further that government interest.⁶⁴

Attempts to limit the Copyright Clause by calling upon the principles contained in the First Amendment are attempts to alter copyright doctrine by applying the First Amendment's underlying

for ideas or governmental works, and fair use").

^{61.} Hamilton, *supra* note 60 at 611-15; Rodney Smolla, *Information as Contraband: The First Amendment and Liability for Trafficking in Speech*, 96 NW. L. REV. 1099, 1127 (2002):

If the First Amendment were understood to create a presumptive right to publish anything that might be deemed 'true,' legal recourse for a vast array of injuries effectuated through the revelation of truthful material would be eviscerated, from the revelation of trade secrets to disclosure of information that one is contractually bound to keep confidential.

^{62.} BICKEL, supra note 44, at 199.

^{63.} See Turner Broad. Sys., Inc. v. FCC, 512 U.S. 622, 657 (1994) ("[N]ot every interference with speech triggers the same degree of scrutiny under the First Amendment.").

^{64.} United States v. O'Brien, 391 U.S. 367, 377 (1968).

[Vol. 2

principles without its corresponding doctrinal limitations. Does the First Amendment embody principles that are inconsistent with perpetual copyright or the granting of copyright in works that have fallen into the public domain? Maybe. It depends on one's view of the First Amendment. In fact, one's view of the First Amendment may determine whether any particular protection results in a net harm to speech at all, much less the degree of harm that has to be weighed against some nonspeech-enhancing benefit.⁶⁵ But even if the First Amendment does contain such principles, that is only the beginning of the analysis as a matter of First Amendment doctrine. Free speech principles often give way when they are outweighed by competing legislative interests, but arguments that the reach of the copyright *power* is limited by principles contained in the First Amendment would prohibit all such regulation, without regard to its net regulatory effect. Thus, proponents of particular views of the First Amendment could obtain through the Copyright Clause that which they could not obtain through the application of the First Amendment itself: an absolute prohibition against copyright laws inconsistent with free speech values.⁶⁶ The availability of such arguments is not hypothetical – arguments supporting the Copyright Clause's denial of protection to facts based on the need to have access to facts for the purposes of debate raise precisely this problem.⁶⁷

Of course, the very availability of First Amendment review of copyright legislation⁶⁸ severely undercuts any call for vigorous judicial review of copyright laws on the basis of speech protections genetic to the Copyright Clause. Even if Congress is given carte blanche to exercise its copyright power based on its own interpretation of the Copyright Clause, legislation overly harmful to speech interests will be invalidated by the Court under the First Amendment itself. There simply is nothing

^{65.} See Eisgruber, supra note 57, at 30-31.

^{66.} See, e.g., Eldred Petitioners' Brief, supra note 25, at 13 (arguing for a standard of review for the Copyright Clause more rigorous than that applied to the Commerce Clause because, in part, "copyright values intersect with First Amendment liberties"); Malla Pollack, *Dealing with Old Father William, or Moving from Constitutional Text to Constitutional Doctrine: Progress Clause Review of the Copyright Term Extension Act*, 36 LOY. L.A. L. REV. 337, 383 (2002) (considering the Progress Phrase "a pre-First Amendment First Amendment," which would call for *per se* unconstitutionality of grants that do not serve the dissemination of speech). See also Hamilton, supra note 60, at 614-15 (A First Amendment-based theory of information regulation would likely result in "an absolute standard of review that would invalidate any legislation touching on information.").

^{67.} E.g., Benkler, Free as the Air, supra note 59, at 395-96.

^{68.} Eldred, 123 S. Ct. 769, 789-90 (2003) (copyright laws subject to challenge under the First Amendment).

to be gained by reading into the Copyright Clause potentially fundamental principles already protected by the First Amendment.

Although copyright allocates an important social resource, its effects on speech are much less direct than those resulting from many other economic regulations, such as the labeling requirements of the Food and Drug Act or the disclosure requirements of the Securities Act. But, while the disclosure requirements of the Securities Act must pass First Amendment review,⁶⁹ to argue that the First Amendment has anything to say about how one interprets the reach of the Commerce Clause inverts the analysis. The First Amendment can *limit* the commerce (or copyright) power, but that is quite a different argument from suggesting that it supplies *definition* to the text of Article I.

D. Majorities, Minorities, and the Politics of Copyright

The second and third classes of justifications offered for aggressive judicial review – overreaching that prevents the electorate from exercising political rights and systematic discrimination by the majority against the minority - have also received considerable attention from commentators. In his book *Democracy and Distrust*, for instance, John Hart Ely offered a proceduralist theory of judicial review, which he termed "representation reinforcement," and justified judicial intervention based on the presence of a "malfunction" in representative government.

Malfunction occurs when the process is undeserving of trust, when (1) the ins are choking off the channels of political change to ensure that they will stay in and the outs will stay out, or (2) though no one is actually denied a voice or a vote, representatives beholden to an effective majority are systematically disadvantaging some minority out of simple hostility or a prejudiced refusal to recognize commonalities of interest, and thereby denying that minority the protection afforded other groups by a representative system.⁷⁰

These two breakdowns in the political system are often closely related; one of the most effective ways in which a majority can insulate its discrimination against the minority is to deny the minority access to the avenues of political change.⁷¹

^{69.} SEC v. Wall St. Publ'g Inst., Inc., 851 F.2d 365, 373-74 (D.C. Cir. 1988).

^{70.} JOHN HART ELY, DEMOCRACY AND DISTRUST: A THEORY OF JUDICIAL REVIEW 103 (1980).

^{71.} See Michael J. Klarman, The Puzzling Resistance to Political Process Theory, 77 VA. L. REV. 747 (1991).

I will treat these two categories together, both because of their close relationship and because, when the conversation is limited to copyright, talk of systematic discrimination makes very little sense,⁷² or at least does very little to further the argument that the Copyright Clause deserves to be read restrictively.⁷³ Rather, if one were to describe the relevant "majority" and "minority" for copyright, the holders of economically valuable copyrights play the role of the minority at risk of legislative discrimination by those of us who would gain from relaxing copyright protection.

That the very few owners of valuable copyrights are not a helpless minority is explained by public choice theory – a theory about how the majority's political rights might be nullified, if not suppressed. Public choice theory posits that small groups of individuals who place great value in a set of shared interests (interest groups) will consistently be able to control the legislative agenda in the face of a larger, but diffuse, majority. Such interest groups can effectively commandeer representative government on the relevant issue and through it shift wealth (in the form of legal rights, tax breaks, or whatever) from the majority to their members based not on the merits of such a legislative choice but merely as a result of the group's coordinated political influence.⁷⁴ This is, in a

^{72.} Typically, the form of discrimination considered worthy of heightened judicial review is discrimination based on some seemingly irrelevant criteria, such as race or sex. *See* Adarand Constructors, Inc. v. Pena, 515 U.S. 200 (1995) (race); Craig v. Boren, 429 U.S. 190 (1976) (sex). However, even a broader view of suspect discrimination, *e.g.* Ackerman, *supra* note 52, at 735 n.40, 745 (discrimination against women, homosexuals, and the poor), fails to provide support for heightened judicial review of legislation for consistency with the Copyright Clause.

^{73.} One pair of commentators have suggested that the intellectual property regulations should receive deferential review because they are closely analogized to federal property rights, and that "with respect to a series of constitutional issues involving property - the Supreme Court currently employs a deferential standard in reviewing legislation." Schwartz & Treanor, supra note 1, at 2402. In such cases it is not the characterization of the measure as a property regulation, but rather the absence of some other constitutional interest, that results in lowered scrutiny. See id. at 2401 (distinguishing economic legislation generally, and intellectual property regulation specifically, from the types of legislation to which Ely's process-based justification of heightened judicial scrutiny are more readily applicable); William Michael Treanor, The Original Understanding of the Takings Clause and the Political Process, 95 COLUM. L. REV. 782 (1995) (arguing that the Takings Clause should trigger heightened scrutiny of regulations whose impact is felt by discrete and insular minorities based on a political-process theory of judicial review). A statute that regulates property rights in a way implicating the Carolene Products categories (such as a regulation conferring different property rights to the same class of property based on the race of the owner) will be subjected to the same level of scrutiny as will a similarly flawed law having nothing to do with property (such as a regulation setting different speed limits for the same stretch of road based on the race of the driver).

^{74.} My summary of public choice theory does justice to neither the theory's subtleties nor its many forms. For a more thorough summary, see DANIEL A. FARBER & PHILIP P. FRICKEY, LAW AND PUBLIC CHOICE: A CRITICAL INTRODUCTION ch. 1 (1991).

slightly more developed form, Madison's concern about the destructive potential of "faction."⁷⁵

Many who have called for active judicial review of Congress's exercise of the copyright power have pointed to the problem of public choice as demonstrating a breakdown in the political process that only the Court can correct. The argument goes something like this: Owners of valuable copyrights compose a powerful interest group, while the public (and future generations), which will bear the cost of enhanced copyright protection, are a diffuse group. The disparity of incentives between these two groups is reflected in their relative ability to influence Congress's copyright legislation, which systematically leads to increases in the scope and duration of copyright. This systematic push toward enlarging copyright is the realization of a public choice problem that demonstrates a breakdown of the political process. Breakdowns of the political process are precisely the kinds of problems for which a proceduralist theory of judicial review (such as Ely's) would justify Therefore, judges should read the Copyright judicial intervention. Clause restrictively in order to correct for the public choice problem inherent in Congress's exercise of the copyright power.⁷⁶

53

^{75.} See THE FEDERALIST NO. 10 at 78 (James Madison) (Clinton Rossiter, ed. 1961). To Madison, "faction" is "a number of citizens, whether amounting to a majority or minority of the whole, who are united and actuated by some common impulse of passion, or interest, adverse to the rights of others citizens, or to the permanent and aggregate interests of the community."

Ironically, Madison himself addressed this question, arguing that the owners of intellectual property rights were more likely to be victims than winners in the political process:

Is there not also infinitely less danger of [the] abuse [of monopolies] in our Governments than in most others? Monopolies are sacrifices of the many to the few. Where the power is in the few it is natural for them to sacrifice the many to their own partialities and corruptions. Where the power, as with us, is in the many not in the few, the danger can not be very great that the few will be thus favored. It is much more to be dreaded that the few will be unnecessarily sacrificed to the many.

Letter from James Madison to Thomas Jefferson (Oct. 17, 1788), in 14 THE PAPERS OF THOMAS JEFFERSON 21 (1958).

^{76.} See, e.g., Eldred Petitioners' Brief at 27-28; Benkler, supra note 56, at 571 ("What is important to understand for contemporary purposes of institutional design is that insofar as the progress of knowledge is concerned, the basic assumption is that the politics of faction will lead to too much recognition of exclusive rights at the expense of the common good."); Michael H. Davis, Extending Copyright and the Constitution: "Have I Stayed Too Long?", 52 FLA. L. REV. 989, 993 (2000):

The process, however, seems to have failed with the [CTEA], because massive extensions of future copyrights were enacted – with no real support for such encroachments upon the public domain and the public interest – just to gain retrospective protection of existing copyright terms. John Hart Ely has discussed an analogous problem in the larger area of judicial review generally.

The argument proves too much. Copyright does not present any special form of public choice problem; it is the same public choice problem that exists whenever a well-coordinated minority has much to gain from the enactment of a slight burden on a diffuse majority. If the presence of legislative capture or the existence of rent-seeking were an adequate basis for heightened judicial scrutiny, *every* exercise of congressional power that could favor a well-organized minority over the majority demands vigorous scrutiny.⁷⁷ "The rent-seeking model, if taken seriously, would require much broader judicial review than even the *Lochner* Court ever contemplated.⁷⁷⁸

Some have argued that copyright presents an unusually severe public choice problem because the burden imposed by copyright expansion is not apparent to average voters; copyright expansion has the effect of a government subsidy, but its implementation is in the form of a hidden tax.⁷⁹ That hardly distinguishes copyright from other opportunities for

77. FARBER & FRICKEY, *supra* note 74, at 68 (listing "tariffs, defense contracts, public works projects, direct subsidies, government loans, and a host of other activities"). *See also* Ackerman, *supra* note 52, at 739-40 (When considering whether to apply heightened scrutiny, the ability of the harmed class to represent itself in the political process should be of little import. Rather, what matters is whether there is discrimination against the group in a way inimical to the fundamental values of the Constitution.).

78. FARBER & FRICKEY, *supra* note 74, at 68; Schwartz & Treanor, *supra* note 1, at 2409 ("Logically, applied, the [Eldred petitioners'] position would lead to a deeply countermajoritarian approach to judicial review....[That] approach contains precisely the same flaws that its critics find in *Lochner*.").

79. See, e.g., Heald & Sherry, supra note 53, at 1168-74; Malla Pollack, Purveyance and Power, or Over-Priced Free Lunch: The Intellectual Property Clause as an Ally of the Takings Clause in the Public's Control of the Government, 30 SW. U. L. REV. 1 (2000).

Although public choice theory is concerned with transparency, that concern is primarily with the transparency of the legislative process, not the transparency of the effects of the legislation, which have little to do with the validity of the reasons for the legislation's

Id.; Marci A. Hamilton, An Evaluation of the Copyright Extension Act of 1995: Copyright Duration Extension and the Dark Heart of Copyright, 14 CARDOZO ARTS & ENT. L.J., 655, 659 (1996) ("The marketing and concomitant lobbying power of the copyright industries, and their repeated victories at the expense of individual authors (most particularly in the workmade-for-hire context) is a clarion call to the Court to read the Copyright Clause with fresh attention and historical understanding."); Karjala, supra note 13, at 245-46 ("Especially where special interests have managed to convince Congress to pass legislation that is directly contrary to the express constitutional purpose, some independent review of the basis for the legislation is imperative."); Merges & Reynolds, supra note 53, at 52-56 (public choice one of three reasons for "Taking the Patent and Copyright Clause Seriously"). See also Brief of Amici Curiae Jack M. Balkin, Yochai Benkler, Burt Neuborne, Robert Post, and Jed Rubenfeld at 19, Eldred v. Ashcroft, 123 S. Ct. 769 (2003) (01-618) ("Copyright legislation typically produces . . . systematic structural distortions of the political process [because of the relative strength of the interests of copyright owners and those harmed by greater copyright protection], and these distortions will always skew copyright legislation towards everincreasing protection, with only occasional exemptions where specific harms are directly borne by cohesive interest groups such as broadcasters, cable operators, or software producers.") (arguing for heightened judicial review under the First Amendment).

legislative rent-seeking. The same opacity is present in the case of tariffs, which also serve as subsidies that are paid by consumers in the form of higher prices for (often downstream) goods.⁸⁰ But only the most radical devotee of public choice theory would argue that Congress's exercise of the power to set tariffs, to use Madison's example,⁸¹ should be policed by courts to ensure that Congress has not fallen prey to special interests.⁸²

The Framers were concerned about the possibility of legislative capture by economic interests, to be sure, but their solution was not aggressive judicial review. Instead, the Constitution's solution is to gather a large group of geographically dispersed individuals with divergent interests under a republican government.⁸³ Arguments that we should rely on judicial review as the solution to copyright-owner rentseeking are arguments that we should respond to a problem with representative government by discarding it; it is a solution to a problem identified by the Framers that ignores the very system they put in place.

Certainly intellectual property regulation presents opportunities for small, well-organized groups to seek and obtain rents from society; such groups have done so consistently. The same can be said of dozens of areas of federal regulation, yet we don't hear calls for *constitutional* limitations on Congress's ability to levy tariffs or provide senior citizens with prescription drug benefits. Other than an awkwardly worded clause in the Constitution to provide a textual hook, what makes copyright so special? More relevantly, how can such widely applicable concerns about the legislative process justify judicial intervention in applying the ambiguous text of the Copyright Clause? The presence of rent-seeking in copyright cannot be enough to warrant denying Congress the power to make copyright policy.

passage. Thus, public choice theory commonly concerns itself with the problem of legislators avoiding responsibility for legislation by delegating policymaking responsibility to others. *See* FARBER & FRICKEY, *supra* note 74, at 136-39. *See also* ELY, *supra* note 70, at 131-34 (arguing that judicial review is appropriate to correct for attempts by the legislature to reduce its accountability to the electorate by delegating policymaking authority to administrative agencies). Again, that problem is no more likely to arise in the context of copyright than it is to arise in any other area of economic regulation.

^{80.} See Stephen P. Magee, Endogenous Protection: The Empirical Evidence, in PERSPECTIVES ON PUBLIC CHOICE 526, 548 (Dennis C. Mueller ed., 1997).

^{81.} THE FEDERALIST NO. 10, *supra* note 75, at 80.

^{82.} *Cf.* J.W. Hampton, Jr., & Co. v. United States, 276 U.S. 394, 412 (1928) ("Whatever we may think of the wisdom of a protection policy [as embodied in an import tariff], we can not hold it unconstitutional.").

^{83.} THE FEDERALIST NO. 10, *supra* note 75, at 83-84. *See also id.* at 78 (rejecting the reduction of liberty as a solution to the problem of faction).

E. Copyright and the Balance of Power

Nor do arguments that the Court take an active role in policing the copyright power fall into the final category of justifications for aggressive judicial review: maintenance of the relative power of the various competitors for power in the constitutional system. The need for judicial review in such cases is obvious: The constitutional scheme relies heavily for its stability on dividing power among various governmental entities, and the entities cannot themselves be trusted to decide the boundaries of their own power.⁸⁴ For every increase in the ability of one to control another, there is a corresponding loss by the one being controlled. The Court, with its limited ability to make or implement policy and its consequently greater degree of impartiality, is the best judge of the proper boundaries between the Constitution's various governmental entities.⁸⁵

That maintaining the balance of power among governmental entities can be a basis for vigilant judicial review will hardly come as news to Court-watchers. Although the Court has consistently enforced the separation of powers among the branches of the federal government,⁸⁶ it has been particularly aggressive of late in its review of laws that potentially alter the relationship between the federal and state governments. Concern over maintaining the federal-state balance of power is perhaps most apparent in the Court's resurgent Tenth and

^{84.} Lynn A. Baker & Ernest A. Young, *Federalism and the Double Standard of Judicial Review*, 51 DUKE L.J. 75 (2001) (highlighting the incentives to aggrandize and the lack of any political constraints on Congress's doing so); Steven G. Calabresi, *A Government of Limited and Enumerated Powers: In Defense of* United States v. Lopez, 94 MICH. L. REV. 752, 795-99 (1995) (arguing that not only are individual members of Congress more dependent for reelection on national parties than they are on state interests, but also that they have an interest in increasing federal control in order to increase the size of the "pool of resources or 'pork" out of which they can distribute political favors to their supporters).

^{85.} EISGRUBER, *supra* note 49, at 201.

Professor Eisgruber would further cabin judicial intervention in matters of institutional balance to those cases particularly served by the Court's increased degree of impartiality, in particular, those cases involving a moral constraint on governmental action. Thus, according to Professor Eisgruber, the Court's intervention in City of Boerne v. Flores, 521 U.S. 507 (1997), which involved religious liberty, was justifiable, but its broader intervention under the Commerce Clause is not. EISGRUBER, *supra* note 49, at 201.

^{86.} See, e.g., Clinton v. New York, 524 U.S. 417 (1998) (striking the Line Item Veto Act); Bowsher v. Synar, 478 U.S. 714 (1986) (holding that the Comptroller General, who is removable by Congress, may not carry out executive powers); INS v. Chadha, 462 U.S. 919 (1983) (striking unicameral legislative review of the Attorney General's immigration decisions); Buckley v. Valeo, 424 U.S. 1, 137-43 (1975) (per curiam) (limiting the powers of the Federal Election Commission because its members were not appointed in accordance with the Appointments Clause).

Eleventh Amendment jurisprudence,⁸⁷ but it is also at the root of the Court's Commerce Clause cases.

United States v. Lopez,⁸⁸ the 1995 case that signaled a shift from the post-New Deal Court's attitude of decided deference to Congress's own sense of the scope of the commerce power, reflects the Court's perception of the system of enumerated powers embodied in Article I, Section 8 as designed by the Framers expressly to prevent the federal government from overreaching into the sphere of state control: "Just as the separation and independence of the coordinate branches of the Federal Government serves to prevent the accumulation of excessive power in any one branch, a healthy balance of power between the States and the Federal Government will reduce the risk of tyranny and abuse from either front."⁸⁹ Justice Kennedy's *Lopez* concurrence argues that the most important issue in any Commerce Clause case is the adverse effect of federal regulation on state power and that the potential for harm to the balance of power is the very reason why the Court must not defer to Congress in interpreting the reach of the Commerce Clause.⁹⁰ The

^{87.} See Alden v. Maine, 527 U.S. 706, 749 (1999) ("A power to press a State's own courts into federal service to coerce the other branches of the State, furthermore, is the power first to turn the State against itself and ultimately to commandeer the entire political machinery of the State against its will and at the behest of individuals."); Printz v. United States, 521 U.S. 898, 922 (1997) ("The power of the Federal Government would be augmented immeasurably if it were able to impress into its service – and at no cost to itself – the police officers of the 50 States.").

The Court's lack of deference is equally, and given the similarity of the issues, unsurprisingly present in its refusal to grant Congress much discretion to interpret the scope of its power to enact laws pursuant to Section 5 of the Fourteenth Amendment. See City of Boerne v. Flores, 521 U.S. 507, 534 (1997) (Even if the Religious Freedom Restoration Act (which invalidated neutral state laws that "substantially burden" the free exercise of religion) could be interpreted to provide a weak test for state laws, "the statute nevertheless would require searching judicial scrutiny of state law with the attendant likelihood of invalidation. This is a considerable congressional intrusion into the States' traditional prerogatives and general authority to regulate for the health and welfare of their citizens."); id. at 536 ("RFRA contradicts vital principles necessary to maintain separation of powers and the federal balance."); Robert C. Post & Reva B. Siegel, Equal Protection by Law: Federal Antidiscrimination Legislation After Morrison and Kimel, 110 YALE L.J. 441, 512 (2000) ("[O]ne might even say that, having worked so hard in Seminole Tribe to establish state Eleventh Amendment immunity from suits predicated upon federal commerce power, the Court was not about to cede to Congress free rein to override that immunity under Section 5."). But that is not to say that Section 5 provides Congress no discretion. See Nev. Dept. of Human Res. v. Hibbs, 123 S. Ct. 1972, 1983 (2003) (applying the congruence and proportionality test to find the Family Medical Leave Act a valid, prophylactic exercise of its Section 5 power to prevent States from violating the Fourteenth Amendment's prohibition against gender discrimination, even though the FMLA is not limited in its reach to actions that amount to unconstitutional gender discrimination).

^{88. 514} U.S. 549 (1995).

^{89.} Id. at 552 (quoting Gregory v. Ashcroft, 501 U.S. 452, 458 (1991)).

^{90.} Lopez, 514 U.S. at 578 (Kennedy, J., concurring):

Although it is the obligation of all officers of the Government to respect the

[Vol. 2

Court built upon the federalist justification for its willingness to intervene in the Commerce Clause context in United States v. Morrison, a case holding that Congress exceeded its commerce power in granting a private right of action to redress gender-motivated violence.⁹¹ According to the Court, given the paucity of findings that gender-motivated violence has a substantial effect on interstate commerce, "the concern we expressed in Lopez that Congress might use the Commerce Clause to completely obliterate the Constitution's distinction between national and local authority seems well-founded."92 The Court also emphasized the win-lose nature of Commerce Clause questions as a reason for giving a wide berth to the Clause's limits in 2001's Solid Waste Agency of Cook County v. United States Army Corp of Engineers.⁹³ "Congress does not casually authorize administrative agencies to interpret a statute to push the limit of the congressional authority. This concern is heightened where the administrative interpretation alters the federal-state framework by permitting federal encroachment upon a traditional state power."94

In an effort to call upon the Court's attitude of intervention in such cases, many, including the plaintiffs in *Eldred*, have argued that the Court should apply a similar level of review to congressional attempts to broaden copyright power.⁹⁵ Indeed, such an argument was the centerpiece of Judge Sentelle's *Eldred* dissent in the D.C. Circuit.⁹⁶

constitutional design, the federal balance is too essential a part of our constitutional structure and plays too vital a role in securing freedom for us to admit inability to intervene when one or the other level of Government has tipped the scales too far. (citations omitted)

Id. See also Lawrence Lessig, *Translating Federalism:* United States v. Lopez, 1995 SUP. CT. REV. 125, 130 (*"Lopez* limits federal power in the name of state autonomy....").

^{91. 529} U.S. 598, 601-02 (2000) (describing the Violence Against Women Act, 42 U.S.C. § 13981).

^{92.} Morrison, 529 U.S. at 615. See also id. at 610-11 (the Commerce Clause's limitation to economic regulation prevents Congress from exercising police powers, which the Framers reserved to the States); id. at 618-19 (Congress may not exercise the general police power, which is reserved to the States); Buzbee & Schapiro, *supra* note 46, at 138.

^{93. 531} U.S. 159 (2001).

^{94.} SWANCC, 531 U.S. at 172-73. The dissent in SWANCC also viewed the question in such terms; it just differed on whether the power implicated by the Clean Air Act is a traditional state power. See id. at 191 (Stevens, J., dissenting).

^{95.} See, e.g., Coenen & Heald, supra note 59, at 110 (arguing that the Court should apply heightened review to the CTEA because of concerns over accountability, as it did in *Lopez*); Epstein, supra note 43, at 138-44 (arguing that the Court should apply greater scrutiny to the CTEA than to Commerce Clause cases, which Epstein believes deserve something approaching intermediate scrutiny); Karjala, supra note 13, at 239-50 (arguing that the CTEA might pass pre-*Lopez* rational basis scrutiny but that Commerce Clause scrutiny is too lenient for copyright legislation because the Copyright Clause has so many more limitations than the Commerce Clause).

^{96.} Judge Sentelle wrote:

Carrying on Judge Sentelle's sentiment, the *Eldred* petitioners invoked the entirety of the Court's recent federalism jurisprudence in their Supreme Court brief,⁹⁷ and explained "In *Lopez* and *Morrison*, the principle of enumerated powers supported the values of federalism. But there could be no principled reason why federalist limits should be judicially enforced while copyright's limits should not."⁹⁸

I would like to suggest one.

While vigilant judicial review in the federalism context is a response to the possibility that Congress has taken power from the States, thereby altering the balance of power so carefully established by the Constitution, the exercise of the copyright power presents no similarly fundamental danger to the constitutional order because exercise of the copyright power does not in any way impinge on the authority of the States. Of course, exercise of the copyright power *could* impinge on the authority of the States, but only by altering the rights of the States to regulate.⁹⁹ If the Copyright Act presents a problem worthy of judicial review under the federalism cases, it is Section 301 of the Copyright Act, which expressly takes power from the States by preempting state copyright laws.¹⁰⁰ But

98. Eldred Petitioners' Brief at 13.

99. Or by making the States amenable to suit for copyright infringement. See Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Sav. Bank, 527 U.S. 627 (1999) (Eleventh Amendment immunity for States from patent infringement suits); Coll. Sav. Bank v. Fla. Prepaid Postsecondary Educ. Expense Bd., 527 U.S. 666 (1999) (same for Lanham Act claims). The Copyright Act explicitly provides for liability on the part of States, Copyright Remedy Clarification Act, Pub. L. No. 101-553, 104 Stat. 2749 (1990) (codified at 17 U.S.C. §§ 501(a), 511), a provision widely considered to be unconstitutional. See Chavez v. Arte Publico Press, 180 F.3d 674 (5th Cir. 1999); Daniel J. Meltzer, Overcoming Immunity: The Case of Federal Regulation of Intellectual Property, 53 STAN. L. REV. 1331, 1332 (2001).

100. See 17 U.S.C. § 301(a):

[A]ll legal or equitable rights that are equivalent to any of the exclusive rights within the general scope of copyright as specified by section 106 in works of authorship that are fixed in a tangible medium of expression and come within the subject matter of copyright as specified by sections 102 and 103, whether created before or after that date and whether published or unpublished, are governed exclusively by

59

It would seem to me apparent that [Lopez's] concept of "outer limits" to enumerated powers applies not only to the Commerce Clause but to all the enumerated powers, including the Copyright Clause, which we consider today. In determining whether the legislation before it in such cases as Lopez exceeded the outer limit of the authority granted under the Commerce Clause, the Lopez Court laid out a precise outline concededly not applicable by its terms to the construction of other clauses, but I think most useful in conducting the same sort of examination of the outer limits of any enumerated power.

Eldred v. Reno, 239 F.3d 372, 381 (D.C. Cir. 2001), *rev'd sub nom*, Eldred v. Ashcroft, 123 S. Ct. 769 (2003) (Sentelle, J., dissenting).

^{97.} See Eldred Petitioners' Brief at 11-12 (citing Judge Sentelle's dissent as well as Lopez and Morrison (Commerce Clause), City of Boerne (Tenth Amendment and Section 5 of the Fourteenth Amendment), and Kimel v. Fla. Bd. of Regents, 528 U.S. 62 (2000) (Eleventh Amendment and Section 5 of the Fourteenth Amendment).

[Vol. 2

alterations to the *scope or duration* of copyright do not shift power from some other entity (state or federal) to Congress – they merely alter the legal rights of private parties, which is not the sort of constitutional selfdealing that requires vigilance by the Court under any theory of judicial review concerned with the balance of governmental powers. Instead, copyright legislation presents only the potential for – constitutionally speaking – the milder form of congressional self-dealing described by public choice theory. And, as demonstrated above, the potential for rent-seeking by private special interest groups is far too broad a justification to support heightened judicial review in the copyright context.

Simply put, copyright does not go to the essence of the constitutional framework in the same way that federalism does, and the Court's decision in *Eldred* reflects the distinction. So long as Congress sticks to altering the legal rights of private parties instead of governmental entities, the Court has little interest in second-guessing its decision to do so, and rightly so. The Court struck the Violence Against Women Act not because it altered the legal rights of Christy Brzonkala and Antonio Morrison in an unconstitutional way but rather because it altered the regulatory rights of the federal and state governments in an unconstitutional way.¹⁰¹ No similar alteration of governmental powers is presented by any substantive change to the copyright laws.

Although the Rehnquist Court has been willing to enforce limits on the reach of Congress's Article I powers, the theory underlying that willingness does not extend to review of copyright legislation. Congress's self-interest in altering the federal-state balance of power in its favor, along with the singular importance of maintaining that balance in the larger constitutional scheme, calls for close review of any legislation that expands Congress's regulatory universe. But copyright presents neither the same potential for congressional avarice nor the same degree of harm in the event of congressional overreaching. Assuming that Section 301 is constitutional, there simply is no inter-governmental balance of power to be maintained in matters of copyright. Aggressive judicial review of

this title. Thereafter, no person is entitled to any such right or equivalent right in any such work under the common law or statutes of any State.

Of course, §§ 501(a) and 511 similarly implicate problems of federalism. See supra note 99.

^{101.} See Morrison, 529 U.S. at 627 ("If [Brzonkala's] allegations [of sexual assault by Morrison] are true, no civilized system of justice could fail to provide her a remedy for the conduct of respondent Morrison. But under our federal system that remedy must be provided by the Commonwealth of Virginia, and not by the United States."). Cf. New York v. United States, 505 U.S. 144, 166 (1992) ("We have always understood that even where Congress has the authority under the Constitution to pass laws requiring or prohibiting certain acts, it lacks the power directly to compel the States to require or prohibit those acts.").

2003]

copyright legislation cannot be justified by reference to the Court's federalism jurisprudence.

F. Copyright and the Policy of Progress

The only constitutional issue raised by the CTEA and most expansions of copyright is quite narrow and specific to the Copyright Clause itself: Is there a need for the Court to review copyright legislation to determine whether it *actually promotes progress? Eldred* (at least as limited to the Copyright Clause) did not require resolution according to fundamental interests, the correction of some profound corruption of the democratic process beyond the normal concerns of public choice, or the protection of the Constitution's very existence through preservation of the distinction between the federal and state governments.¹⁰² Stripped of pretense, *Eldred* and cases like it are simply appeals to the Court to intervene by second-guessing Congress's conclusion that a particular piece of copyright legislation promotes progress. In the balance of the paper, I will endeavor to explain why such invitations are properly declined.

III. THE COURT AS COPYRIGHT POLICYMAKER

The starting place for any discussion of whether the Court should intervene in the decisions of Congress must be the premise that the Court should only intervene when there is a clear justification for doing so. That is the premise underlying the counter-majoritarian difficulty; it is a normative preference for democratic self-government and is articulated in the Constitution's conscious choice of the republican form of government. When the Constitution's text is not clear, the Constitution's preference for representative government requires the Court to defer to Congress in the absence of some larger justification for intervention, be it moral or constitutional. The arguments for judicial intervention discussed in the previous section represent such justifications. The question is whether there is an equally powerful justification for an interventionist approach to the Copyright Clause.

Our preference for republican lawmaking may itself be a strong enough argument to rebut assertions that the Court is the right political entity to make copyright policy. But I would like, for the moment, to

^{102.} See Ginsburg, supra note 2, at 376 (distinguishing the lack of Supreme Court interest in enforcing "internal" limits on Article I powers from its willingness to review legislation for violations of "external" limits, such as "separation of powers, federalism, and individual rights concerns").

ignore the intrinsic value of democratically made policy and focus simply on the Court's capacity to make good copyright policy with the tools the Constitution has given it. Even if we forget the Constitution's preference for republican government, the Court's institutional weaknesses caution against giving it any meaningful role in regulating copyright – a concern reflected by the many bromides the Court has offered us about its relative ability to make economic policy.¹⁰³ When we remind ourselves of the Court's place in the constitutional framework, the case for aggressive judicial review of the copyright power dissolves completely.

The best way to demonstrate the point is through examination of the Court's most audacious attempt at constitutional copyright policymaking in the last 130 years: *Feist Publications, Inc. v. Rural Telephone Service Co.*

A. Feist and the Policy of Denying Protection to Facts

The policy announced by the Progress Phrase is the promotion of progress, but whether a particular protection will actually promote progress is often not only unknown, it's unknowable. A prime example is copyright's awarding of less protection to non-fiction works than to fictional ones. The degree of protection afforded by copyright decreases as the work becomes more factual,¹⁰⁴ to the point that facts are not protected at all, which is the rule of *Feist. Feist* maintains that denying protection to facts is not just textually required by the word "writings," it's good copyright policy. Copyright's denial of protection to facts "is the means by which copyright advances the progress of science and art."¹⁰⁵ The theory supporting that policy choice is that the extra incentive gained from providing protection would be outweighed by the lost ability to freely copy the facts, with a net loss to progress.¹⁰⁶ Is that correct? It's impossible to say.

We don't know what would happen if Congress extended copyright protection to facts. Perhaps there would be a flood of inexpensive factbased works if their creators could easily recapture the cost of creating

^{103.} *See, e.g.*, General Motors Corp. v. Tracy, 519 U.S. 278, 308 (1997) (noting that the Court is "institutionally unsuited to gather the facts upon which economic predictions can be made, and professionally untrained to make them").

^{104.} Nash v. CBS, Inc., 899 F.2d 1537, 1542-43 (7th Cir. 1990) (Easterbrook, J.).

^{105.} Feist Publ'ns, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 350 (1991).

^{106.} E.g., William Patry, *The Enumerated Powers Doctrine and Intellectual Property: An Imminent Constitutional Collision*, 67 GEO. WASH. L. REV. 359, 365 (1999) ("Only original works promote the progress of science; unoriginal material does not promote the progress of science, and is therefore constitutionally incapable of protection.").

them, with consumers benefiting from that broader availability even if they themselves do not purchase the works (for instance, they could benefit from lower prices because suppliers of goods are able to reduce their costs by buying and using certain fact-based works). New protection might enable new modes of distribution for such works that entail lower transaction costs.¹⁰⁷ Currently, authors of unprotectable fact works can prevent free distribution of their works only through such selfhelp measures as encryption technology or tightly enforced licensing arrangements, both of which can be unwieldy and expensive. Many have offered theoretical models to support or attack protection of facts,¹⁰⁸ but no one can prove what the net effect to progress would be of granting copyright-like protection to facts.

Indeed, the only thing that is certain is uncertainty; some forms of fact protection would likely promote progress, while others would surely hinder it.¹⁰⁹ Trade secret law, for instance, is an example of a narrow form of protection for facts that many believe encourages innovation.¹¹⁰ One can easily imagine weaker forms of copyright in facts that would have a net positive effect on progress.

But Congress cannot extend any form of copyright protection to facts, nor can the Court allow it to, because of the decision in *Feist*. The durability of constitutional adjudication makes it particularly ill suited to deciding what promotes progress given the rapidly changing economics of intellectual property. Even if *Feist* was correctly decided as a matter of constitutional law, it was breathtakingly short-sighted as a matter of policy. Twelve years ago, our ability to share information was still limited to paper, 1200 baud modems, and floppy disks. Regardless of whether one agrees with extending protection to facts, it is undeniable that no one (and certainly not the Court) understood the economic ramifications of the *Feist* decision in 1991.¹¹¹ We don't understand *Feist*'s ramifications in 2003 because we still can't foresee how industry and information technology will evolve. Intellectual property is in a constant struggle to adapt to technological and economic change, which

^{107.} See ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1449-50, 1455 (7th Cir. 1996) (Easterbrook, J.) (describing the efficiencies to be had from allowing authors control over fact works); Ginsburg, *supra* note 2, at 387 (data protection may further free speech interests by encouraging wider dissemination of fact-based works).

^{108.} See Ekstrand, supra note 23 (collecting sources).

^{109.} Ginsburg, supra note 2, at 378.

^{110.} See Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 474, 493 (1974).

^{111.} Rochelle C. Dreyfuss, A Wiseguy's Approach to Information Products: Muscling Copyright and Patent into a Unitary Theory of Intellectual Property, 1992 SUP. CT. REV. 195, 221-22.

[Vol. 2

makes it particularly dangerous to etch any particular vision of "progress," or what it takes to promote it, into constitutional stone.

The longevity of constitutional rules is not the worst problem presented by constitutional judicial review of copyright legislation. Indeed, one could argue that it is no easier to get Congress to change its mind than it is to get the Court to, a problem that's exacerbated in the case of an established entitlement. It would probably be no harder to get *Feist* reversed than it would be to get Congress to repeal the CTEA.

What makes the Court's approach in *Feist* so troublesome is that, despite its sweeping policy pronouncement, the Court made no serious inquiry in Feist into what "progress" is, much less whether the creative originality requirement *actually promotes* it. There are two reasons why the Court never did that analysis: First, the meaning of the Copyright Clause was not directly at issue in Feist. The Court, and both parties, considered the outcome in *Feist* to be dictated by the statute. Although the Court interpreted Section 102 in light of the Constitution, the constitutional text did not control the case's outcome.¹¹² Second, and more importantly, the Court did not bother to analyze the policy effects of its ruling because it didn't think it was making a policy decision. The Court considered its statement in *Feist* to be an interpretation of the Constitution and not a decision about which means, as a matter of fact, best promote progress. Interpretation of the Constitution is a matter of text and precedent, not policy and economic outcomes. In Feist, the thoughts of Justice Samuel F. Miller, author of the two 19th-century cases on which Feist primarily relied,¹¹³ grossly outweighed anything that someone like Jack Valenti or the *Eldred* plaintiffs could have said about whether the Court's decision to exclude facts from copyright protection would necessarily promote progress.

B. The Framers' Copyright

Reliance on history as a guide to the appropriate exercise of the copyright power is an uncertain venture given the mixed signals

^{112.} Ginsburg, *supra* note 2, at 378-79; *id.* at 382 & n. 207.

^{113.} Miller authored both The Trade-Mark Cases, 100 U.S. 82 (1879), and Burrow-Giles Lithographic Co. v. Sarony, 111 U.S. 53 (1884). Of course, even if Justice Miller had a perfect vision of copyright, it's not at all clear that the Court in *Feist* correctly applied his guidance or that the Court had an accurate understanding of history. *See* Ginsburg, *supra* note 2, at 374-75; Ochoa & Rose, *supra* note 53, at 930 (describing the grant of a private copyright to a book of "tables of discount and interest" in 1828 and pointing out that, "[a]t that time, the investment of time and money [the bases rejected in *Feist*] was at least arguably an acceptable basis for copyright protection").

contained in what little the Framers did say about copyright.¹¹⁴ Even if we could be confident in the Court's ability to deduce what the Framers thought copyright should be, it's not at all clear that we should want them to. And therein lies a second problem of relative competence – not the relative competence of the Court and Congress but the relative competence of the *Framers* and Congress. Unlike the Framers, Congress evolves as an institution and it continues to accumulate knowledge about markets for intellectual property, both as an abstract matter and because those markets change over time. Newton turned out to have an incomplete understanding of physics; why do we think that Madison had a more complete understanding of intellectual property?

We know almost nothing about the process of authorship or of authors' responsiveness to the incentives offered them by the copyright system; it is virtually certain that the Framers knew even less. It does not appear to have been a topic of much importance to them. The Records of the Federal Convention show no debate over the Patent and Copyright Clause, nor does there appear to have been more than the slightest mention of copyright at any of the state ratifying conventions.¹¹⁵ What little discussion there was at the state conventions indicates that the primary import of the Patent and Copyright Clause was not to assure any particular substantive limitation on Congress's ability to grant copyrights but rather to solve the problem of non-uniform state intellectual property laws.¹¹⁶ Similarly, Madison's cursory treatment of the Patent and Copyright Clause in Federalist No. 43 is hardly evidence that the copyright policy expressed in the Clause – much less the copyright policy expressed by the Clause's limitations, which garnered no mention by Madison at all – was the product of careful consideration.¹¹⁷

It is equally clear that whatever policy insights the Framers had into copyright have been rendered obsolete by changes in the economics of the creation, copying, or use of intellectual property (and likely all

^{114.} Thomas B. Nachbar, *Constructing Copyright's Mythology*, 6 GREEN BAG 2D 37, 44 (2002) (no single understanding of copyright prevalent at the time of the framing).

^{115.} Irah Donner, *The Copyright Clause of the U.S. Constitution: Why Did the Framers Include It with Unanimous Approval?*, 36 AM. J. LEGAL HIST. 361, 361 (1992) (Federal Convention of 1787); *id.* at 376-77 (state ratifying conventions); Ochoa & Rose, *supra* note 53, at 922-28 (detailing mentions of intellectual property among the Framers, at state ratifying conventions, and by authors during the period of ratification); Schwartz & Treanor, *supra* note 1, at 2376 (same).

^{116.} Donner, *supra* note 115, at 376-77.

^{117.} THE FEDERALIST NO. 43, supra note 75, at 271-72 (James Madison) (Clinton Rossiter ed., 1961). See also Howard B. Abrams, Copyright, Misappropriation, and Preemption: Constitutional and Statutory Limits of State Law Protection, 1983 SUP. CT. REV. 509, 516 n. 38 (Federalist 43's cursory mention of intellectual property indicates "that in the public debate over ratification of the proposed constitution, the issue of copyright was comparatively insignificant.").

three).¹¹⁸ At the heart of claims that the CTEA is unconstitutional, for example, is the conviction that Congress should not be allowed to tie us to a 1980s'model of film distribution and preservation because doing so violates an eighteenth-century model of intellectual property. But eighteenth-century copyright policy doesn't necessarily represent fundamentally correct copyright law; it was just the policy deemed most appropriate for the time, as a matter of both economics and political morality.¹¹⁹ Were the Framers so much better at copyright that we should be anxious to restrain our political freedom by looking to them instead of today's Congress to make twenty-first-century copyright policy?¹²⁰ We may not be happy with the CTEA, but the 1790 Act's twenty-eight-year copyright term can hardly reflect better policy for today's intellectual property markets. Is it really time for *Star Wars* to fall into the public domain?

^{118.} Ginsburg, *supra* note 2, at 379-81.

^{119.} Nachbar, *supra* note 114, at 45-46. For instance, the Framers' policy of allowing the widespread piracy of foreign works ignores the modern importance of international copyright protection to American interests. As Graeme Austin explains:

Unless originalist understandings of the scope of copyright law are cognizant of both necessary responses to technological evolution and public international law obligations, much of today's copyright law would be subject to attack on the basis that it departs dramatically from the Framers' conceptions. For the historical claims to work, the United States either needs to return to its pirate ways, or the protection of foreign authors needs to be completely discounted in the analysis. Neither prospect has much appeal.

Austin, supra note 38, at 42. See also Shira Perlmutter, Participation in the International Copyright System as a Means to Promote the Progress of Science and Useful Arts, 36 LOY. L.A. L. REV. 323, 332-33 (2003) (As a matter of realpolitik, maximizing progress requires compromising with other nations on matters of copyright policy, which an inflexible approach toward constitutional copyright would make impossible.).

^{120.} For example, the framing generation passed a law very similar to the one under attack in Golan v. Ashcroft, *see* discussion *supra* note 32, a statute restoring intellectual property rights in a work that had fallen into the public domain. *See* Act of Jan. 21, 1808, ch. 13, 6 Stat. 70 (1808). Worse yet, this private act in favor of Oliver Evans restored his patent rights in an invention whose patent had *expired* four years earlier after running its course, a seemingly even more egregious violation of the "limited Times" requirement. The act was enforced by Justice Marshall riding circuit, and the Supreme Court on appeal, against a defendant who had constructed an embodiment of the invention after the 1804 expiration but before the private bill's passage in 1808. Justice Marshall held, and the Court affirmed, that the defendant's construction of the invention during the period of invalidity did not insulate him from liability after the patent had been renewed. Evans v. Jordan, 8 F. Cas. 872 (C.C.D. Va. 1813) (No. 4,564), *aff'd*, 13 U.S. (9 Cranch) 199 (1815). On the nineteenth-century practice of granting patent extensions generally, see Tyler T. Ochoa, *Patent and Copyright Term Extension and The Constitution: A Historical Perspective*, 49 J. COPYRIGHT SOC'Y U.S.A. 19, 58-72 (2001)

C. Objectivity and Progress

The problems of judicial intervention are magnified when one considers the value judgment inherent in any interpretation of the Progress Phrase. Application of the Progress Phrase involves a nested imponderable: Not only is the net effect on progress of virtually any change in the copyright law imponderable, but the very nature of progress is itself imponderable. Wouldn't it promote progress to deny copyright protection to pornography on the theory that people are distracted by it and waste time that could otherwise be spent reading technical manuals or great literature? Certainly the copyright clause does not demand such differential treatment,¹²¹ but does it prohibit it?

Viewed this way, the *Eldred* petitioners' argument is not so much that progress is not being served by the CTEA as it is that the right *kind* of progress is not being served. Eric Eldred and company contended that exclusive rights can only be granted as an incentive to create new works. But why is that necessarily the best way to promote progress? Why not confer more rights to encourage distribution of existing works? Even if the CTEA is a windfall to those who happen to own valuable copyrights, isn't it possible to promote progress by providing that windfall? Consider it a subsidy to those who are good at managing copyrighted works, one that allows them to continue in the endeavor. Whether any of these effects of the CTEA promote progress depends on one's definition of "progress," and that definition, I maintain, is completely contingent.

In the absence of a universally held definition of progress, the seemingly irrational but preference-aggregating nature of legislative decisionmaking seems particularly well suited to the making of copyright policy; judicial review (with its emphasis on history, rationality, and ends-means relationships) appears a correspondingly poor choice,¹²² recognition of which was in no small measure behind the Court's decision to turn away from the regime of economic substantive due process that defined the first third of the twentieth century.¹²³ Put another way, belief about what promotes progress is not, in Bickel's

^{121.} See Mitchell Bros. Film Group v. Cinema Adult Theater, 604 F.2d 852, 859 (5th Cir. 1979).

^{122.} Other than the obvious public choice problems, which I've already established are no basis for judicial intervention along constitutional lines, copyright is as amenable to (admittedly controversial) pluralistic conceptions of lawmaking, *see, e.g.*, Gary Becker, A *Theory of Competition Among Pressure Groups for Political Influence*, 98 Q.J. ECON. 371 (1983), as any subject can be.

^{123.} Barry Cushman, *Formalism and Realism in Commerce Clause Jurisprudence*, 67 U. CHI. L. REV. 1089 (2000).

words, one of "society's basic principles."¹²⁴ That reality leaves judges at a decided disadvantage in applying the Progress Phrase. Even if one were indifferent about whether copyright policy be made by the judicial or elected branches of government, demonstrating that judges will make better copyright policy than Congress would be a hard case. But, of course, we do care about whether law is made by judges or legislators; given the political and contingent nature of copyright policy, it is difficult to see how advocates for judicial review of copyright legislation can overcome the counter-majoritarian difficulty's intuitive preference that policymaking take place in the elected branches of government.

IV. JUDGES, COPYRIGHT, AND THE COPYRIGHT CLAUSE

The question remains: How should the Court review copyright legislation for consistency with the Copyright Clause? My suggestion is decidedly unoriginal – I would suggest a more deferential form of "rational basis" review than the rational basis review we have come to expect in the Commerce Clause context¹²⁵ – a standard of review that some have called "minimal rational basis" or "conceivable basis."¹²⁶ This is the standard of review the Court generally employs in cases challenging state statutes under the Equal Protection Clause of the Fourteenth Amendment when a "suspect" class is not involved.¹²⁷ It is also the standard of review the Court applies to federal economic regulation challenged under the Fifth Amendment's Due Process Clause.¹²⁸

Indeed, I am describing the standard of review that the Court eventually applied to the federal statute challenged in *Carolene Products*. Having already dealt with the Commerce Clause challenge, the Court responded to the defendant's Fifth Amendment rational-basis challenge by explaining that "by their very nature such inquiries, where the

^{124.} BICKEL, *supra* note 44, at 70.

^{125.} Cf. Gerdes, supra note 45, at 1475 (citing Carolene Products and suggesting that the Court apply the rational basis standard of review that it applies in the Commerce Clause and Substantive Due Process contexts). My argument is that the rationale at work in Carolene Products suggests a difference between the Commerce Clause and Due Process flavors of "rational basis" review.

^{126.} LAURENCE H. TRIBE, AMERICAN CONSTITUTIONAL LAW at 1445-46 (2d ed. 1988). Although the Court refers to this standard of review as "rational basis" review, it does differ from the "rational basis" standard used in Commerce Clause cases, so I will use Tribe's moniker of "conceivable basis" review in order to distinguish the two.

^{127.} *Id.* at 1445 & n.21 (collecting cases). *See also* Schwartz & Treanor, *supra* note 1, at 2412-13 (distinguishing "classic rational basis review – the standard of review that the modern court applies in the economic realm" from a higher standard of scrutiny the Court applies in cases involving "suspect" factors).

^{128.} TRIBE, supra note 126, at 1445 (collecting cases).

legislative judgment is drawn into question, must be restricted to the issue of whether any state of facts either known or which could reasonably be assumed affords support for it."¹²⁹ Just before the famous footnote of exceptions, the Court made the degree of its deference clear:

Even in the absence of [stated legislative findings and legislative reports], the existence of facts supporting the legislative judgment is to be presumed, for regulatory legislation affecting ordinary commercial transactions is not to be pronounced unconstitutional unless in light of the facts made known or generally assumed it is of such a character as to preclude the assumption that it rests upon some rational basis within the knowledge and experience of the legislators.130

Thus, the conceivable basis test relieves the legislature of any duty to consider particular facts or make stated conclusions; the Court will infer a valid purpose if one *could have* existed.¹³¹ As the court explained in FCC v. Beach Communications, Inc., under Fifth Amendment Due Process review, "a legislative choice is not subject to courtroom factfinding and may be based on rational speculation unsupported by evidence or empirical data."¹³² There is no need for the legislature to have been presented with or considered facts; unsupported "rational speculation" is enough. Contrast this with Lopez, in which the Court pointedly highlighted the lack of congressional fact-findings as undercutting the government's claim that the regulation of guns in schools is the regulation of "[c]ommerce . . . among the several States."¹³³

My proposal has the support not only of history, but also of general applicability, for it is a standard that applies to all of Congress's Article I powers so long as one keeps in mind the various justifications for heightened judicial review. All it takes to distinguish between when to apply rational basis review and when to apply conceivable basis review is

^{129.} United States v. Carolene Products, Inc., 304 U.S. 144, 154 (1938).

^{130.} Id. at 152 (emphasis added).

^{131.} United States R.R. Ret. Bd. v. Fritz, 449 U.S. 166, 179 (1980) ("Where, as here, there are plausible reasons for Congress' action, our inquiry is at an end. It is, of course, constitutionally irrelevant whether this reasoning in fact underlay the legislative decision") (internal quotation omitted).

^{132. 508} U.S. 307, 316 (1993); Heller v. Doe, 509 U.S. 312, 320-21 (1993) ("The burden is on the one attacking the legislative arrangement to negative every conceivable basis which might support it, whether or not the basis has a foundation in the record.") (internal quotation marks and citation omitted). See also Bd. of Trs. of Univ. of Ala. v. Garrett, 531 U.S. 356, 367 (2001) (citing the standard used in *Beach Communications* and *Heller*).

^{133.} Lopez, 514 U.S. at 563. See also Buzbee & Schapiro, supra note 46, at 100 (describing the Court's approach to the federalism cases as a refusal "to assume the existence of the necessary predicates" and an unwillingness "to defer to the legislative conclusions embodied in or supported by the record").

to remind ourselves of why higher scrutiny is necessary in the cases in which it is applied: When it is possible that a one member of the federal system is extending its power at the cost of others, higher scrutiny is required as a response to the potential for self-serving behavior, but the Court applies the lower conceivable basis standard when it is satisfied that the sovereign in question does indeed have plenary power in the area being regulated. Thus, once the Court in Carolene Products established that the regulation in question was within Congress's plenary interstate commerce power, the Court applied the more deferential Fifth Amendment standard. The same sensitivity to the balance of power applies in the review of state legislation. When a state law is challenged on equal protection grounds (not involving a suspect class), the primacy of the State's police power is not in question, and so the Court applies the more deferential conceivable basis standard. But when a state law has the effect of regulating interstate commerce, an area of *federal* primacy, the Court subjects the law to a much stricter level of review.¹³⁴

^{134.} *Compare* Allied Stores of Ohio, Inc. v. Bowers, 358 U.S. 522, 526-27 (1959) (state tax with domestic effect will be upheld so long as it is not "palpably arbitrary"), *with* Okla. Tax Comm'n v. Jefferson Lines, Inc., 514 U.S. 175, 183 (1995) (A tax with an effect on interstate commerce will be sustained only if it is "applied to an activity with a substantial nexus with the taxing State, is fairly apportioned, does not discriminate against interstate commerce, and is fairly related to the services provided by the State.") (internal quotations omitted). *See also* Metro. Life Ins. Co. v. Ward, 470 U.S. 869, 881 (1985):

Under [dormant] Commerce Clause analysis, the State's interest, if legitimate, is weighed against the burden the state law would impose on interstate commerce. In the equal protection context, however, if a State's purpose is found to be legitimate, the state law stands as long as the burden it imposes is found to be rationally related to that purpose, a relationship that is not difficult to establish.

Id. The difference is that, in the dormant Commerce Clause context, the Court itself weighs the balance of the burdens, whereas in the equal protection context, the Court defers to legislative balancing and looks only for some rational relationship between means and ends. R. Randall Kelso, *Standards of Review under the Equal Protection Clause and Related Constitutional Doctrines Protecting Individual Rights: The "Base Plus Six" Model and Modern Supreme Court Practice*, 4 U. PA. J. CONST. L. 225, 230-33 (2002).

The difference in degrees of review described in *Metropolitan Life Insurance* also answers claims by commentators that the means-ends nature of the grant in the Copyright Clause justifies a higher level of review. *See, e.g.*, Coenen & Heald, *supra* note 59, at 103-15; Epstein, *supra* note 43, at 134-35 (intermediate scrutiny); Pollack, *supra* note 66, at 384; Solum, *supra* note 21, at 65-66. The existence of a means-ends relationship between granting exclusive rights and promoting progress may help the Court identify the end the statute should serve, but it does nothing to determine the *level* of review the Court should apply when evaluating whether the means serve the end in question. Thus, the Court might balance the harms and benefits as it does in dormant Commerce Clause cases, or it might merely look for some rational relationship between the means and the end. Of course, the Copyright Clause's limitation of the permissible ends of copyright legislation to promoting progress is not much of a limit given the many potential definitions of "progress." *See supra* text accompanying note 121.

And if Section 301 of the Copyright Act is constitutional, then copyright is one of those areas in which the federal government's power truly is plenary. In the absence of any federalism concerns, there is no reason for the Court to apply standard more restrictive than the conceivable basis test.

In the Progress Phrase context, the test should reflect the dual ambiguity of the phrase itself; the test should be whether a piece of copyright legislation could conceivably further any conceivable definition of "progress."¹³⁵ That is a fairly close approximation of the standard of review the Court applied in Eldred. When considering whether the CTEA is "a rational exercise of the legislative authority conferred by the Copyright Clause," the Court deferred to Congress's suppositions about the CTEA's effects, saying simply that "we are not at liberty to secondguess congressional determinations and policy judgments of this order, however debatable or arguably unwise they may be."136 The tone of complete deference carried over into the Court's examination of Congress's compliance with the Progress Phrase; the Court reiterated that "it is generally for Congress, not the courts, to decide how best to pursue the Copyright Clause's objectives."137 And, although it did not directly consider Congress's ability to define "progress," the Court made it clear that it would enforce no particular definition of "progress" on Congress.¹³⁸

71

^{135.} I am not arguing that the Court should apply the political question doctrine to congressional interpretation of the meaning of the Progress Phrase. In the first place, the scope of the doctrine does not seem to reach matters of public lawmaking, and the doctrine's continued vitality is debatable. See Rachel E. Barkow, More Supreme than Court? The Fall of the Political Question Doctrine and the Rise of Judicial Supremacy, 102 COLUM. L. REV. 237 (2002) (collecting sources). But, more importantly, I do not believe Congress should have absolute authority to interpret the Copyright Clause, as would be the case if the political question doctrine applied. There are some cases in which the text is clear, for instance in the case of a facially perpetual grant, and there are circumstances in which Congress could not be promoting any vision of progress, such as by making the various exclusive rights inalienable, which would make it impossible to exploit works of authorship.

^{136.} Eldred v. Ashcroft, 123 S. Ct. 769, 783 (2003).

^{137.} *Id.* at 785; *id.* at 781 n. 10 (rejecting Justice Breyer's "heightened, three-part test for the constitutionality of copyright enactments" as inconsistent with the Court's literary property jurisprudence). *See also* Ginsburg, *supra* note 2, at 375 ("Congress should enjoy substantial discretion in implementing its constitutional prerogative to 'promote the Progress of Science.").

^{138.} *Eldred*, 123 S. Ct. at 781-83 (recognizing that not only creation of works, but also improved international competitiveness and the restoration and increased dissemination of existing works, could further the Copyright Clause's objectives).

V. CONCLUSION

Textualist approaches to the Copyright Clause that attempt to parse the exact meaning of "limited Times" or the Progress Phrase border on the formalistic and ignore both the inherent ambiguity in the Clause's text and the very real possibility that not all constitutional text calls for the same approach to judicial review. Attempts to provide meaning to the Copyright Clause by importing principles purportedly contained in express constitutional prohibitions (such as the Free Speech Clause of the First Amendment) also distort the analysis by ignoring the limited application of those prohibitions. Instead, what is needed is a theory of judicial review that recognizes both the peripheral nature of the Copyright Clause – as it relates to fundamental interests and constitutional structure – and the political and economic nature of copyright.

The profound insights of the Framers in the field of government especially as they touch upon unchanging aspects of human nature, such as the power of self-interest and our natural inclination toward expediency – make tinkering with the constitutional order a perilous enterprise. But there is no evidence to suggest that the Framers gave copyright more than a second thought. At the same time, the realities of copyright, unlike the forces that drive our choice of government, change constantly, and the dangers of giving in to expediency are no more acute in copyright than in other legislative contexts. The Framers' incomplete and disparate understandings of copyright policy neither deserve nor require the same level of judicial scrutiny as is applied to the portions of the Constitution devoted to protecting fundamental interests and maintaining the structural protections put in place to secure those interests. Instead, we should ask ourselves whether Congress, in exercising the copyright power, could conceivably be serving a conceivable definition of "progress." To ask for more would be to freeze development of the concept of "progress" - an ironic result.

The proper response to the Court's handling of the Copyright Clause in *Eldred* is a sigh of relief – relief that the Court did not exercise the kind of judicial exuberance that led to the constitutionalization of data protection in *Feist*. All that judges can do by holding Congress to a strict reading of the Copyright Clause is to permanently tie us to a version of copyright that reflects neither the nation's political will nor the changing realities of intellectual property. Regardless of how one feels about the policies embodied in the CTEA, heightened constitutional review of copyright legislation is a cure far worse than the disease.

CODE VERSUS THE COMMON LAW

STACEY L. DOGAN^{*}

INTRODUCTION

Lawrence Lessig called the most recent battle "Hollywood v. Silicon Valley,"¹ but one could just as well dub it "Code v. The Common Law." The content industries' latest efforts to re-calibrate the balance of copyright² imply that the United States copyright system has reached a crisis that cannot be resolved under existing law. In particular, bills such as the Consumer Broadband & Digital Television Promotion Act³ would

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^{1.} Lawrence Lessig, *Hollywood v. Silicon Valley: Make New Code, Not War*, CIO INSIGHT, June 17, 2002, *available at* http://www.cioinsight.com/print_article/0,3668,a=28373,00.asp (last visited Nov. 12, 2002); *see also* Drew Clark & Bara Vaida, *Digital Divide*, NATIONAL JOURNAL, Sept. 6, 2002, *available at* http://nationaljournal.com/ about/njweekly/stories/2002/0906nj1.htm (detailing the history of the growing tension between content industries and technology providers); Steven Levy, *Glitterati vs. Geeks*, NEWSWEEK, Oct. 14, 2002, *available at* http://msl1.mit.edu/ESD10/docs/glit_and_geeks.pdf (same).

^{2.} See Consumer Broadband and Digital Television Promotion Act, S. 2048, 107th Cong. (introduced Mar. 21, 2002); see also 17 U.S.C. §§ 1201–1202 (2000) (statute making it a violation of civil and criminal law to tamper with "rights-management" information, or to circumvent technology that controls access to copyrighted works or protects rights of copyright owners); Sonny Bono Copyright Term Extension Act, S. 505, P.L. 105-298, 11 Stat. 2827 (1998) (extending copyright term). See generally JESSICA LITMAN, DIGITAL COPYRIGHT 35-69 (2001) (describing history of expansionist copyright legislation and interest group influence).

^{3.} Consumer Broadband and Digital Television Promotion Act, S. 2048, 107th Cong. (introduced Mar. 21, 2002). This bill was proposed in the 2001-02 legislative session but never passed out of committee, and has not been reintroduced in the current session. While this particular legislation appears to have fallen from the table for the time being, the federal government continues to consider other initiatives to mandate and standardize copy-protection technologies. *See, e.g.*, Digital Broadcast Copy Production, *Notice of Proposed Rulemaking*, 17 F.C.C.R. 16,027 (2002) (initiating rulemaking proceeding to decide whether FCC should mandate standardized copy protection technology for digital television); *cf.* Declan

usurp current standards of secondary copyright infringement in favor of a more aggressive approach against those whose technologies facilitate the copying of digital works. The proposal—a mandate that technology developers embed specific copy-protection technology into hardware and software products—would involve unprecedented levels of intrusion into the technology design process. A victory for Hollywood would thus represent a triumph not only of code law over common law, but also of legislated computer code over market-driven technologies.⁴

Critics have catalogued the shortcomings of the Hollings bill: it tampers with the historically frantic pace of innovation in technology; it represents yet another capitulation to Hollywood; it threatens to deprive users of the right to make "fair use" of digital works.⁵ But few have focused on a fundamental question posed by the legislation: Do the disruptions caused by digital technology justify a rethinking of the core model for copyright in the United States? More specifically, should Congress convert copyright from a system focused primarily on enforcement of exclusive rights against individuals into one that spreads more broadly the responsibility for either preventing, or compensating for, the unauthorized use of copyrighted works?⁶

McCullagh, *Congressional Caucus Targets Piracy*, CNET NEWS.COM, May 19, 2003, *available at* http://news.com.com/2100-1028_3-1007908.html (last visited May 21, 2003) (describing new Congressional caucus "devoted to combating piracy and promoting strong intellectual property laws"). *See generally* Randall C. Picker, *From Edison to the Broadcast Flag: Mechanisms of Consent and Refusal and the Propertization of Copyright*, 70 U. CHI. L. REV. 281 (2003).

^{4.} By describing existing technologies as "market-driven," I do not mean to suggest that they have all evolved in an efficiently functioning market lacking in externalities; to be sure, many of the technologies discussed in this paper have been driven exclusively by a demand for their infringing applications. But at least some—and maybe most—of the broad array of products covered in the Hollings proposal were designed primarily for neutral, non-infringing purposes, and the bill's interference with these products strikes me as anti-market and unprecedented.

^{5.} See, e.g., Lessig, supra note 1 ("While Hollywood cries 'theft,' it uses Washington to ensure that a vibrant competitive market for producing and distributing content on the Internet is never realized."); Alex Salkever, Guard Copyrights, Don't Jail Innovation, BUSINESSWEEK ONLINE, Mar. 27, 2002, available at http://www.businessweek.com/daily/dnflash/mar2002/nf20020327_2364.htm (last visited Nov. 12, 2002) (contending that the Hollings bill "clearly flouts the interests of consumers" and is "more evidence that, when it comes to delivering content in the 21st century, the entertainment industry is hell-bent on stifling technology, rather than using it in ways that eventually could become highly profitable").

^{6.} Congress already expanded the scope of responsibility for infringement when it passed the Digital Millennium Copyright Act, which proscribes, among other things, the use or distribution of technologies that circumvent access and copy controls embedded in copyrighted works. See 17 U.S.C. § 1201. For an insightful critique of the economics of secondary liability and cost spreading in copyright law, see Douglas Lichtman & William Landes, *Indirect Liability in Copyright Infringement: An Economic Perspective*, 17 HARV. J. LAW & TECH. 395 (2003).

The answers to these questions are less obvious than either side in the current debate would admit. Opponents of legislative action have both history and the Supreme Court on their side when they argue that only active infringers, and those closely related to them, should bear the costs of unauthorized copying.⁷ As these opponents point out, Congress has rarely used its copyright powers⁸ to tamper with new technologies, even those specifically designed to duplicate creative content.⁹ And the Supreme Court, in Sony v. Universal City Studios,10 declared that copyright holders should almost never have veto power over new technologies. The inducement objectives of copyright, the Court held, cannot justify liability against all parties whose products may be used to infringe, because such liability would expand the economic dominion of the copyright holder into markets that have nothing to do with their expression. Instead, the Court found copyright liability appropriate only against manufacturers of technologies with no "substantial noninfringing use."11 Sony thus established that, under the common law of copyright, makers of neutral technologies need not pay taxes or redesign

^{7.} Existing law limits liability for copyright infringement to three categories of defendants: (1) those who themselves commit an act of infringement, see Religious Tech. Ctr. v. Netcom On-Line Communication Servs., Inc., 907 F. Supp. 1361, 1370 (N.D. Cal. 1995) (direct infringement "requires some element of volition or causation which is lacking where a defendant's system is merely used to create a copy by a third party"); (2) those who provide substantial assistance to others' acts of infringement, see Gershwin Publ'g Corp. v. Columbia Artists Mgmt., 443 F.2d 1159, 1162 (2d Cir. 1971) (defining a contributory infringer as "one who, with knowledge of the infringing activity, induces, causes or materially contributes to the infringing conduct of another") (internal citations omitted); and (3) those who have a right and ability to supervise a direct infringer, and who obtain a direct financial benefit from her acts of infringement, see Shapiro, Bernstein & Co. v. H.L. Green Co., 316 F.2d 304, 307 (2d Cir. 1963) ("When the right and ability to supervise coalesce with an obvious and direct financial interest in the exploitation of copyrighted materials... the purposes of copyright law may be best effectuated by the imposition of liability upon the beneficiary of that exploitation.") (internal citations omitted).

^{8.} See U.S. CONST. art. I, § 8, cl. 8 ("The Congress shall have Power... to promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.").

^{9.} See, e.g., Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 442 (1984) (Sony) (holding that copyright liability cannot extend to copying devices that have "substantial non-infringing uses"). Congress has occasionally changed the copyright law to account for new technologies, but has rarely done so by giving copyright holders injunctive power over the new technology. See, e.g., 17 U.S.C. § 115 (compulsory license requirement added after the introduction of piano rolls); 17 U.S.C. §§ 1002-1007 (setting forth levy scheme for digital audio recording devices); see generally Jane C. Ginsburg, Copyright and Control over New Technologies of Dissemination, 101 COLUM. L. REV. 1613 (2001) (reviewing history of courts' and Congress' treatment of new technologies).

^{10.} Sony, 464 U.S. at 442.

^{11.} Id.

their products to satisfy the self-protective instincts of copyright holders. 12

Yet history and common law tell only part of the story. The world has changed, even since *Sony*.¹³ The combination of digital formats and the Internet has made it possible for individuals to make perfect copies of digital works and to distribute them around the world. The advent of file-sharing technologies has decentralized the distribution process, making it daunting to identify and take action against individual infringers. Given the collective creativity and tenacity of those with an interest in such technologies, the legal arms of the content industries will arguably never keep pace with their development. Just as Grokster and KaZaA cropped up in the immediate wake of Napster,¹⁴ so will existing sharing and distribution tools give way to new generations of technologies that copyright holders will likely stand powerless to avert.¹⁵

^{12.} Because *Sony* involved an off-the-shelf technology product, rather than a service, the case left open the possibility that parties with an ongoing relationship with their customers might have a greater responsibility for preventing infringement. *See* Stacey L. Dogan, *Is Napster a VCR? The Implications of* Sony v. Universal City Studios *for Napster and Other Internet-Related Actors*, 52 HASTINGS L.J. 939 (2001) (considering *Sony's* implications for Internet services). Both the Ninth Circuit and the Seventh Circuit have interpreted *Sony* to require some preventive actions by Internet actors, at least in certain circumstances. *See* A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1021-24 (9th Cir. 2001) (finding that Napster had an affirmative obligation to remove infringing files from its system); In re Aimster Copyright Litig., 334 F.3d 643, 653 (7th Cir. 2003) (Posner, J.) (indicating that even when an Internet service has significant noninfringing uses, "if the infringing uses are substantial then to avoid liability as a contributory infringer the provider of the service must show that it would have been disproportionately costly for him to eliminate or at least reduce substantially the infringing uses").

^{13.} The Supreme Court in *Sony* made clear that "it is Congress that has been assigned the task of defining the scope of the limited monopoly" of copyright, 464 U.S. at 429, and that Congress, rather than the courts, should make any necessary adjustments to the copyright balance in response to technological change. *Id.* at 431 ("Sound policy, as well as history, supports our consistent deference to Congress when major technological innovations alter the market for copyrighted materials. Congress has the constitutional authority and the institutional ability to accommodate fully the varied permutations of competing interests that are inevitably implicated by such new technology.").

^{14.} See, e.g., John Borland and Gwendolyn Mariano, Looking for the Next Napster, CNET NEWS.COM, July 5, 2001, available at http://news.com.com/2009-1023-269454.html (last visited Jan. 27, 2003) (describing some of the emerging post-Napster file-trading networks).

^{15.} See Neil Weinstock Netanel, Impose a Noncommercial Use Levy to Allow Free P2P File Sharing, 17 HARV. J.L. & TECH. (forthcoming 2003) (draft at 5 & n. 12), available at http://www.utexas.edu/law/faculty/nnetanel/Levies_chapter.pdf (last visited Sept. 29, 2003) ("computer security experts maintain that no technological barrier can ultimately prevail over determined hackers who have physical access to the encrypted items, including, in this instance mass-marketed CDs and DVDs, personal computers, consumer electronic devices, and software embedded in those items"); John Borland, Freenet Keeps File-Trading Flame Burning, CNET NEWS.COM, Oct. 28, 2002, available at http://new.com.com/2100-1023-963459.html (last visited Jan. 27, 2003) (describing Freenet anonymous file-sharing technology).

This confluence of technological developments clearly threatens the traditional distribution model for movies, music, and other forms of creative expression. It also may threaten the economic model upon which our copyright laws are based. Under the United States Constitution, Congress has the power to grant authors exclusive rights in order to induce creative expression. If authors or their assigns can capture the core market for reproduction and distribution of their expression, they will arguably have an incentive to create and distribute. But in a digital, interconnected world, the dispersion of copying and distribution activities makes it more difficult for copyright holders to identify users who derive value from their works. At least theoretically, the inability to capture such value could ultimately jeopardize the incentive to produce and distribute creative expression.

There is widespread disagreement over what, if anything, should be done about these threats. Some think that artists and publishers should accept that the world has changed and that they can no longer profit from exclusive copying and distribution rights.¹⁶ Others argue that the existing model of exclusive rights could serve the ends of copyright, if only publishers contained their greed; in this view, the public would willingly pay for copies of works if the content providers distributed them in a format and cost structure that appealed to consumers.¹⁷ A third

^{16.} E.g., Raymond Shih Ray Ku, *The Creative Destruction of Copyright: Napster and the New Economics of Digital Technology*, 69 U. CHI. L. REV. 263, 268 (2002) ("[I]n light of alternative methods for funding musicians, including statutory levies, denying the public access to music can no longer be justified as a necessary or desirable means for encouraging the creation of music.").

^{17.} See, e.g., Ann Bartow, Arresting Technology: An Essay, 1 BUFF. INTELL. PROP. L.J. 95, 118-19 (2001) ("In cyberspace as in real space, most U.S. citizens (or 'netizens') are law abiding most of the time. As long as it is reasonably convenient, efficient, and economical to gain access to a movie by renting a videocassette or DVD, ordering it through 'pay-per-view,' or watching it on cable television (all of which garner royalties for content owners), then few people are likely to invest a lot of time and energy in obtaining counterfeit copies of the movie or gaining unauthorized access to any copies."); Glynn S. Lunney, Jr., The Death of Copyright: Digital Technology, Private Copying, and the Digital Millennium Copyright Act, 87 VA. L. REV. 813, 858-68 (2001) (advocating an "honor system" in which consumers regulate themselves: "All the public needs is some general statement, such as that found in copyright law, reflecting and reinforcing the principle that excessive unauthorized copying is improper.").

The early success of Apple's ITunes, and of other recently-introduced technologies for authorized distribution of music files, support the view that at least some consumers will make use of legal alternatives to file-sharing. *See, e.g.*, John Borland, *Music Services Jump on ITunes Bandwagon*, CNET NEWS.COM, July 28, 2003, *available at* http://news.com.com/ 2100-1027-5056162.html?tag=n1 (last visited Aug. 14, 2003) (reporting that, since the popular pay-per-song ITunes service was launched in April 2003, "a stampede of companies is following Apple Computer pell-mell into the online music sales business"); John Borland, *Europeans to Get Windows Music Store*, CNET NEWS.COM, Aug. 13, 2003, *available at* http://news.com.com/2100-1027-5063595.html (last visited Aug. 14, 2003) (noting new payper-song service that Microsoft is launching in Europe); John Borland, *Sony to Launch Net Music Service*, CNET NEWS.COM, Sept. 4, 2003, *at* http://news.com.com/2100-1027-

group supports use licenses and technology levies as a means to compensate artists while threatening the hegemony of traditional publishers.¹⁸ And finally, a vocal group of content providers contends that our incentive-based copyright system can function in a digital environment if—and only if—Congress mandates the inclusion of standardized, digitized enforcement tools in every technology that plays a role in making and sending copies.¹⁹

All but one of these views reflects a fundamental rethinking of the role of copyright in our society. The first view effectively dismisses—as outdated or, perhaps, ill-conceived—the Constitutional aspiration of using exclusive rights to spur creative endeavor.²⁰ The last two proposals, though radically different from one another, share an important common feature: each would replace our current law, which centers on copyright owners and those who actually use their works, with one that sweeps a much broader array of characters into the legal arena. The levy model would replace the current market-based approach to intellectual property licensing with a government-imposed royalty system and, under some proposals, would tax a wide range of products and services to support creative artists.²¹ And the Hollings scheme would burden an assortment of related industries with responsibility for policing publishers' copyrights.²²

This Article critically evaluates a core assumption that underlies these latter two schemes: that the challenges posed by file-sharing either cannot, or should not,²³ be addressed through application or moderate

22. Consumer Broadband and Digital Television Promotion Act, S. 2048, 107th Cong. (introduced Mar. 21, 2002).

^{5071475.}html (reporting Sony announcement of its impending launch of an "in-house digital music service" that "will see its music, move and electronics divisions work closely together").

^{18.} *E.g.*, Netanel, *supra* note 15; Lessig, *supra* note 1 (advocating compulsory license for distribution of works online, in which "businesses that make or facilitate the distribution of unprotected copyright content should have the right to use that content so long as they pay a relatively low, fixed rate").

^{19.} E.g., Hearing on Protecting Content in a Digital Age-Promoting Broadband and the Digital Television Transition: Full Committee Hearing Before the Senate Comm. on Commerce, Science & Transportation, 107th Cong. 2-3 (2002) [hereinafter Hearing on Protecting Content in a Digital Age] (testimony of Michael D. Eisner, Chairman & CEO, The Walt Disney Company) (proposing legal requirement that common technological standards "be mandated for inclusion in all digital media devices that handle creative content"); Hearing on Protecting Content in a Digital Age (testimony of Jack Valenti, President & CEO, The Motion Picture Association of America).

^{20.} U.S. CONST. art. I, § 8, cl. 8.

^{21.} E.g., Netanel, supra note 15.

^{23.} The Hollings scheme reflects a sense that current copyright laws cannot contain infringement on file-sharing networks, and that Congress should revamp the laws in order to bring the situation back into control. Neil Netanel and other advocates of a copyright levy, in contrast, believe that the file-sharing revolution presents important opportunities to revolutionize the production and distribution of copyrighted works; they view their proposed reallocation, not as an attempt to restore the prior order, but to impose a new order that

adjustment of the common law of copyright.²⁴ Under existing law, only those who actually engage in acts of reproduction or distribution—and those controlling or working closely with them—are accountable to the copyright holder. While doctrines of contributory and vicarious liability have long existed, courts have hesitated to invoke them against parties or technologies whose primary activities are non-infringing. And they have hesitated for good reasons, some principled and others practical. Before shifting from this acts-based, individualized scheme to one that falls back on neutral technology as either a tax base or an enforcer, we should have confidence that the current system does not work and cannot be fixed.

Part I describes, in historical context, the common law approach to copyright infringement and secondary liability. It explains the careful balance between inducement and restraint reflected in pre-digital copyright law, and explores the features of pre-digital information markets that made it possible to preserve economic incentives in such markets despite fairly circumscribed standards of vicarious and contributory infringement. It continues by identifying the challenges of first-generation consumer copying technologies and explaining why the Supreme Court refused to give copyright holders leverage over these products. This Part concludes that, despite some shifts in the economics of information markets in the early twentieth century, the nature of predigital copying and distribution technologies made it possible to achieve the inducement objectives of copyright law while limiting liability to a tight circle of direct infringers and their associates.

Part II considers the claim that the changes introduced by digital technology justify abandonment of this historical model. It first divides the digital revolution into three stages: digital storage, early generation Internet distribution, and peer-to-peer file-sharing. While the first two stages presented some initial challenges, I suggest that the continued existence of some level of centralization in the distribution process made it possible for copyright holders to use existing legal tools to preserve their essential markets. The real challenge, this Part contends, lies in the most recent phase, peer-to-peer file-sharing, which, with its

preserves incentives while freeing all kinds of new uses of copyrighted works. See Netanel, supra note 15, at 16 (suggesting that levy scheme might be preferable to enforcement of exclusive rights in the file swapping context, given the "wide ranging and partly overlapping costs" of exclusive rights, including costs due to "deadweight loss,... licensing and enforcement,... DRM development and implementation,... impeded consumer economics and P2P network innovation and capacity,... ISP and other third party overdeterrence,... impairment of personal privacy, suppression of P2P users' speech and creativity, and the conflict between law and social norm").

^{24.} By "common law of copyright," I refer to the iterative, incremental process through which United States copyright has historically evolved. I use common law loosely to include statutory amendments that either codify existing case law, *e.g.*, 17 U.S.C. § 107 (2002) (fair use), or otherwise fit this traditional mold.

decentralized distribution, makes it more difficult to stem infringement by focusing on a central set of actors. A number of commentators have argued that this change justifies a fundamental restructuring of copyright, and this Part examines some of these proposals. Given the flaws in these proposals, this Part concludes that we should not turn to them without full confidence that copyright holders cannot preserve meaningful economic markets using existing legal tools.

Part III considers whether the copyright system is indeed broken whether existing tools of copyright law are incapable of serving the law's essential utilitarian goals.²⁵ My goal is not so much to answer this question as to open it for critical debate. It strikes me that neither copyright holders nor the advocates of a levy have yet made the case for a wholesale restructuring of copyright law, because copyright holders have only recently begun using the tool that has served them well historically: the direct infringement suit. In the summer of 2003, the Recording Industry Association of America began a new strategy of identifying and suing individuals engaged in unauthorized file-sharing. While the longterm effect of this strategy has yet to be seen, logic suggests that this renewed focus on primary infringers—i.e., those who actually copy and benefit from copyrighted works—may well deter enough unauthorized file-sharing to stanch the current flood of infringement, without turning copyright into a tax or its enforcement into a civic duty.

I. ALLOCATING BURDENS: THE COMMON LAW

For most of its history, copyright law in the United States centered on the enforcement of exclusive rights against direct infringers.²⁶ None

^{25.} Existing tools include not only traditional contributory and vicarious liability claims, but also the anti-circumvention provisions of the Digital Millennium Copyright Act. See 17 U.S.C. § 1201. That said, most scholars accept that most locks can be cracked, so that even encrypted content will inevitably be available for distribution through file-sharing networks absent ubiquitous technology such as watermark identifying technology. See, e.g., Note, Exploitative Publishers, Untrustworthy Systems, and the Dream of a Digital Revolution for Artists, 114 HARV. L. REV. 2438, 2456 (2001) ("Recent history suggests . . . that [self-help] copy protections will be routinely cracked, and the countertechnologies that defeat encryption may well proliferate as easily as computer users exchange copyrighted works on the Internet-and through the same channels.") (footnotes omitted); Timothy L. Skelton, Internet Copyright Infringement and Service Providers: The Case for a Negotiated Rulemaking Alternative, 35 SAN DIEGO L. REV. 219, 219 (1998) ("Pirated copies of computer software and 'cracker' utilities used to defeat copy-protection schemes are widely available.").

^{26.} The focus on exclusive rights follows from the Constitution, which empowers Congress "[t]o promote the Progress of Science and useful Arts, by securing for limited Times to Authors... the exclusive Right to their... Writings...." U.S. CONST. art. I, § 8, cl. 8. Because the Copyright Act defines direct infringement to include a wide range of activities, including not only reproduction but also distribution, public performance and display, and creation of derivative works, a potentially broad cast of characters can qualify as direct

of the copyright statutes clearly defined liability against those who merely facilitated—rather than committing—an act reserved to the copyright holder.²⁷ And while doctrines of vicarious²⁸ and contributory²⁹ liability emerged in the common law, courts invoked them primarily in cases involving agency relationships or commercial enterprises whose business included promoting infringement.³⁰

This historical focus on direct infringement follows from the Constitutional objective of copyright and the nature of traditional markets for creative expression. The Constitution contemplates a copyright system in which the promise of exclusive economic rights drives creative authorship.³¹ Absent such rights, the argument goes, market failure would occur because authors, unable to recapture their investments in creative works, would turn to other endeavors. By granting authors legal control over uses of their expression, copyright law enables licensing, which ensures the distribution of works to audiences that value them, while at the same time conferring at least some of the

28. Vicarious liability requires a right and ability to supervise infringing activity coupled with a direct financial benefit deriving from the infringement. *See* Gershwin Publ'g Corp. v. Columbia Artists Mgmt., Inc., 443 F.2d 1159, 1162 (2d Cir. 1971).

29. See Gershwin, 443 F.2d at 1162 (holding that "one who, with knowledge of the infringing activity, induces, causes or materially contributes to the infringing conduct of another, may be held liable as a 'contributory' infringer") (footnotes omitted).

31. See U.S. CONST., supra note 26.

infringers. Nonetheless, each of these characters is defined by some use that they have personally made of the copyrighted work.

^{27.} The Copyright Act of 1976 contains only a vague reference to indirect infringement. See 17 U.S.C. § 106 (2002) (granting copyright owners "the exclusive rights to do and to authorize" a series of acts with the copyrighted work) (emphasis added); see also Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 435 & n.17 (1985) (noting lack of clarity in standards of secondary copyright liability, and speculating that such muddiness "may, in part, be attributable to the fact that an infringer is not merely one who uses a work without authorization by the copyright owner, but also one who authorizes the use of a copyrighted work without actual authority from the copyright owner"). The 1909 Act limited civil liability to those who "infringe[d] the copyright" of a protected work, but provided criminal remedies against anyone who "knowingly and willfully" aided or abetted infringement committed for profit. Copyright Act of 1909, 17 U.S.C. §§ 101, 104, repealed by Copyright Act of 1976, 17 U.S.C. § 101 et seq.

^{30.} In Kalem Co. v. Harper Bros., 222 U.S. 55 (1911), for example, a film producer distributed an unauthorized dramatization of Ben Hur to exhibitors who committed infringing public performances. The Supreme Court upheld liability against the producer when such infringement "was the most conspicuous purpose for which they could be used, and the one for which especially they were made." *Id.* at 63. *See also* Shapiro, Bernstein & Co. v. H.L. Green Co., 316 F.2d 304, 308-09 (2d Cir. 1963) (finding department store liable for infringing sales by concessionaire based partly on agency theory); *Gershwin,* 443 F.2d at 1162-63 (imposing liability against organization that knowingly created audience for infringing performances). *See generally* Stacey L. Dogan, *Infringement Once Removed: The Perils of Hyperlinking to Infringing Content,* 87 IOWA L. REV. 829, 897 (2002) (suggesting that, "as originally conceived, vicarious infringement represented an extension of principal/agent liability, in which a party faced legal responsibility for acts that occurred under her supervision and were carried out on her behalf").

proceeds to authors.³² This utilitarian scheme has shaped both legislative and judicial developments in copyright law, generally with expansionist effect. As new markets for creative expression have emerged, Congress and the courts have reserved them to copyright holders, reasoning that authors will thus have an incentive to realize the full economic value of their works.³³

Against this background, the law's historical focus on direct infringement made sense because the primary economic markets for creative expression involved public, identifiable transactions between providers and consumers of copyrighted works. Providers made works available to the public in copies or through some performance or display, and because none of these tasks was costless, few engaged in them in any scale without either a commercial or an altruistic motive. To publish books, one needed a printing press, and the mass production and distribution of other creative works similarly required physical infrastructure of some meaningful size.³⁴ As a result, the task of identifying those who actually created and distributed copies presented a

^{32.} Wendy J. Gordon, Asymmetric Market Failure and Prisoner's Dilemma in Intellectual Property, 17 U. DAYTON L. REV. 853, 854 (1992) (explaining market failure theory of copyright law). But see Stephen Breyer, The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs, 84 HARV. L. REV. 281 (1970) (contending that the first-to-market advantage provides sufficient economic incentive for publishers to fund and publish literary works).

^{33.} See Eldred v. Ashcroft, 123 S. Ct. 769, 786 (2003) (upholding copyright term extension, to life plus seventy years, as rational Congressional decision to "promote ... Progress"); PAUL GOLDSTEIN, COPYRIGHT'S HIGHWAY: FROM GUTENBERG TO THE CELESTIAL JUKEBOX 236 (1994) (advocating allegiance to "copyright's historic logic that the best prescription for connecting authors to their audiences is to extend rights into every corner where consumers derive value from literary and artistic works"); cf. Jane C. Ginsburg, Copyright and Control over New Technologies of Dissemination, 101 COLUM. L. REV. 1613, 1617 (2001) (contending that decisionmakers tend to rebuff copyright holders' attempts to block new formats for content delivery, but "when copyright holders seek to participate in and be paid for the new modes of exploitation, the courts, and Congress, appear more favorable, not only to the proposition that copyright owners should get something for the new exploitation, but more importantly, to the proposition that when the new market not merely supplements but also rivals prior markets, copyright owners should control that new market"); Joseph P. Liu, Owning Digital Copies: Copyright Law and the Incidents of Copy Ownership, 42 WM. & MARY L. REV. 1245, 1285 (2001) ("As new ways of consuming copyrighted works, and correspondingly new market structures, arose, copyright law expanded to include these new models of consumption."). But see Jessica Litman, War Stories, 20 CARDOZO ARTS & ENT. L.J. 337, 342 & n.30 (2002) (enumerating exceptions to copyright holders' exclusive rights to control uses of copyrighted works).

^{34.} See Lunney, supra note 17, at 823-24 (describing scale and centralization of predigital copying and distribution activities); Panel III: Implications of Enforcing the Digital Millennium Copyright Act: A Case Study, Focusing on United States v. Skylarov, 12 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 805, 824 (2002) (comments of Bruce Lehman, former Assistant Secretary of Commerce and Commissioner of Patents and Trademarks) (noting that before the digital revolution, "if you wanted to infringe on somebody's copyright, you had to have some kind of a factory to do so").

manageable challenge to copyright holders.³⁵ And while the more episodic nature of public performances sometimes made detection more difficult, the doctrines of vicarious and contributory infringement allowed recourse against dance halls, agents, and other commercial actors that profited from cumulative acts of infringement.³⁶ To the extent that economic markets existed for creative works, then, copyright holders could exploit them by pursuing the parties that profited from use of their expression and demanding a license or cessation of the activity.³⁷ And at least theoretically, the promise of such markets encouraged the creation and dissemination of works of authorship.

This rough sketch of the incentive side of the copyright equation, of course, tells only part of the story. Under the Constitution, the copyright incentive exists for a purpose—to promote knowledge—and before the digital revolution, this public-oriented objective had its own significant impact on the evolution of copyright law. Fair use,³⁸ first sale,³⁹ originality,⁴⁰ and other limiting doctrines helped to ensure that the public got the benefit of its bargain with content creators, and that future authors had tools with which to create. And because transaction costs made it infeasible for all users of copyrighted expression to obtain

^{35.} See Lunney, supra note 17, at 823 (in the age of the printing press, "the principle of controlling unauthorized reproduction by direct action against individual infringers was both practical and sensible"); *Panel III, supra* note 34, at 824 (in the early twentieth century, "a copyright system that enabled you to sue somebody in a civil lawsuit for copyright infringement generally meant that you were going to sue someone who was in the large-scale, commercial business of copyright infringement").

^{36.} See, e.g., Gershwin Publ'g Co. v. Columbia Artists Mgmt., Inc., 443 F.2d 1159, 1162 (2d Cir. 1971) (finding both contributory and vicarious liability against party that acted as agent for infringing performers); Irving Berlin, Inc. v. Daigle, 26 F.2d 149, 150 (E.D. La. 1928) ("[T]he mere fact that he operated and controlled the place of public entertainment, charging admission and so operating for a profit, establishes his liability for permitting and authorizing the unlicensed use of plaintiff's musical compositions in and on the premises."), aff'd on relevant grounds, rev'd on other grounds, 31 F.2d 832 (5th Cir. 1929); see also Hearing before the Joint Committees on Patents, 60th Cong. 239-41 (1908) 239-41 (representative of theatrical organization advocating criminal liability against parties that advertise and provide material for infringing public performances, and contending that "no matter what the penalty is, if it merely attaches itself to the person who is producing or playing this act, it has been very difficult for us to get them" because the performers "are moving continually all over the country").

^{37.} Tim Wu describes this as the "gatekeeper" feature of copyright law. See Tim Wu, When Code Isn't Law, 89 VA. L. REV. 679, 685 (2003) ("the copyright regime has achieved its goals through enforcement against specialized intermediaries-those capable of distributing creative works on a massive scale").

^{38. 17} U.S.C. § 107.

^{39. 17} U.S.C. § 109(a); *see also* R. Anthony Reese, *The First-Sale Doctrine in the Era of Digital Networks*, 44 B.C. L. REV. 577 (2003) (noting the risks to the first sale doctrine that may result from the increasingly intangible and ephemeral means of disseminating copyrighted works).

^{40.} See Feist Publ'ns., Inc. v. Rural Tel. Serv. Co., 499 U.S. 340, 349 (1991) (requiring some minimal degree of creativity as a prerequisite for copyright protection).

licenses for their use, a certain amount of unauthorized copying continued unchecked.⁴¹ Copyright, then, offered financial incentives, but did not guarantee perfect recovery of the full value of creative works.⁴² The existence of centralized publishing and distribution entities made it possible to protect the broad contours of copyright holders' economic markets without pursuing every individual that made use of their expression. The common law of copyright, in other words, consciously accepted some leakage in markets for copyrighted works, but stepped in to prevent market-destroying floods.

The centralized nature of copying and distribution began to erode somewhat in the late 1950s and early 1960s, with the introduction of technologies that enabled individuals to reproduce expressive content without major capital expenditures. The photocopy machine empowered people to duplicate books or articles in a matter of minutes;⁴³ cassette recorders facilitated copying of music off the air or from recorded

^{41.} In an influential article, Wendy Gordon contended that many of these incidental unauthorized uses should fall within the fair use doctrine. See Wendy J. Gordon, Fair Use as Market Failure: A Structural and Economic Analysis of the Betamax Case and Its Predecessors, 82 COLUM. L. REV. 1600, 1614 (1982) (contending that copyright's fair use doctrine should allow unauthorized uses of copyrighted material when (1) defendant cannot purchase use through the market, (2) defendant's use will serve the public interest, and (3) the use would not "substantially impair[]" the copyright owner's incentives); see also Gordon, supra note 32, at 855 ("if a defendant faces market failure in the face of copyright, that is a good argument (if not a complete one) for not enforcing the copyright against him, for in his case, the economic foundation for copyright has crumbled"). Courts have applied Gordon's market failure analysis to conclude that, as transaction costs decrease and metering of incidental uses becomes feasible, some incidental uses should come within the copyright holder's economic domain. E.g., Am. Geophysical Union v. Texaco Inc., 60 F.3d 913, 930-31 (2d Cir. 1994) ("it is not unsound to conclude that the right to seek payment for a particular use tends to become legally cognizable under the fourth fair use factor when the means for paying for such a use is made easier"). But see Wendy Gordon, Market Failure and Intellectual Property: A Response to Professor Lunney, 82 B.U. L. REV. 1031, 1032-33 (2002) (pointing out that other forms of market failure commonly occur and justify a finding of fair use under the economic model); cf. Glynn S. Lunney, Jr., Fair Use and Market Failure: Sony Revisited, 82 B.U. L. REV. 975, 977 (2002) ("Properly understood, Sony stands not for the proposition that fair use is justified only in those exceptional cases where a licensing scheme or some other market mechanism is impractical. Rather, Sony stands for the recognition of fair use as a central and vital arbiter between two competing public interests"the incentive goals of copyright and the public's interest in access to copyrighted works).

^{42.} See Sony, 464 U.S. 417, 432 (1985) (noting that copyright "protection has never accorded the copyright owner complete control over all possible uses of his work"); Dogan, *supra* note 30, at 883-84 (discussing deliberate "leakage" of United States copyright law, and collecting authorities).

^{43.} See Harvey S. Perlman & Laurens H. Rhinelander, Williams & Wilkins Co. v. United States: Photocopying, Copyright, and the Judicial Process, 1975 SUP. CT. REV. 355, 360-61 (contrasting early copying techniques with new, inexpensive photoduplication technologies); GOLDSTEIN, *supra* note 33, at 79 (discussing introduction of photocopying technology).

sources;⁴⁴ and the Betamax video recorder made it possible to tape television programs in the privacy of individual homes.⁴⁵ For the first time, a significant amount of unauthorized copying was taking place outside of any commercial publishing and distribution network.

The introduction of these new copying technologies raised important questions under copyright law. First, to the extent the new machines shifted some copying activities from centralized, commercial enterprises to individual end users, the law had to resolve whether such activities constituted infringement or fair use.⁴⁶ Second, assuming that at least some parties used the equipment to infringe, it was unclear whether the equipment manufacturers should share legal responsibility for that behavior. Then, as now, the content industries claimed that if they could not capture the value of this atomized, unauthorized copying, they would lose the financial incentive to create and publish books, music, and audiovisual works. And because the dispersion of copying activities made it a daunting task to identify people who reproduced copyrighted works, copyright holders sought to capture at least some of this value from the equipment manufacturers themselves.⁴⁷ To do so, they turned to theories of contributory and vicarious liability that thus far had served as narrow complements to direct infringement claims.48

Despite years of lobbying⁴⁹ and litigation⁵⁰ over these issues, the legal status of end-user copying technologies was not resolved until the

48. As discussed above, before this wave of equipment cases, contributory and vicarious liability was generally imposed only against parties who knowingly committed acts that promoted infringement or whose own commercial enterprise served as an umbrella for infringing behavior. *See* cases cited *supra* note 36.

^{44.} Consumer devices became viable in the mid-1960s. *See* David Balaban, Note, *The Battle of the Music Industry: The Distribution of Audio and Video Works Via the Internet, Music and More*, 12 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 235, 245-46 (2001) (describing history of consumer recording devices).

^{45.} See Sony, 464 U.S. at 417; see also Picker, supra note 3, at 288-91.

^{46.} Alternatively, some argued that personal copying should enjoy a separate exemption from copyright that did not rely on the complex balancing that takes place in fair use analysis. For a narrative history of the debate over personal copying, see GOLDSTEIN, *supra* note 33, at 129-64.

^{47.} See, e.g., Note, Exploitative Publishers, Untrustworthy Systems, and the Dream of a Digital Revolution for Artists, 114 HARV. L. REV. 2438, 2445 (2001) (noting recording industry's panic-stricken reaction to audio cassette technology); Joel L. McKuin, Home Audio Taping of Copyrighted Works and the Home Recording Act of 1992: A Critical Analysis, 16 HASTINGS COMM. & ENT. L.J. 311, 320 (1994) ("While scholars, the recording industry and electronics manufacturers bickered over whether home copying was fair use, repeated bills were introduced in Congress to institute royalties on blank tapes and/or to require equipment manufacturers to adopt electronic copy management systems.").

^{49.} See Perlman & Rhinelander, supra note 43, at 364-66 (outlining legislative efforts to resolve legality of unauthorized photocopying); Joseph E. Young, *Copyright and the New Technologies-the Case of Library Photocopying*, 28 COPYRIGHT L. SYMP. 51, 68-69 & n.56 (1982) (describing publishers' efforts to obtain Congressional endorsement of tiered pricing and use licenses for libraries that engaged in widespread photocopying).

Supreme Court decided Sony v. Universal City Studios in 1984.⁵¹ In Sony, a group of motion picture copyright owners alleged that Sony had committed contributory infringement by selling Betamax video recorders with knowledge that consumers would use them to infringe.⁵² The district court, after a lengthy trial, rejected their claim. The Ninth Circuit, however, reinstated it, finding that those who recorded television programs without authorization were infringing and that Sony had knowingly facilitated that infringement.⁵³ The Supreme Court, by a bare majority, reversed.⁵⁴ The Court reasoned, first, that the primary use of the Betamax—so-called time shifting—constituted fair use.⁵⁵ The Court then borrowed the "staple article of commerce" doctrine of patent law and held that, because the Betamax had a "substantial non-infringing use," its manufacture and sale could not be the basis for a suit in copyright.⁵⁶ To hold otherwise, said the Court, would inappropriately elevate the copyright holder's stake in its limited statutory monopoly over the public's interest in free access to "substantially unrelated" goods.⁵⁷

I have argued elsewhere that Sony's staple article of commerce doctrine, properly interpreted, confines the copyright holder's economic leverage to markets or transactions that owe their existence to infringement.58 Contributory infringement claims, in other words, should not lie against parties whose products or services would have evolved even in the absence of their infringing applications.⁵⁹

54. The questions raised by Sony so perplexed the Court that the majority of justices had initially lined up in support of the movie industry. For an entertaining account, see GOLDSTEIN, supra note 33, at 149-57.

55. "Time-shifting" is the act of "recording a program [the consumer] cannot view as it is being televised and then watching it once at a later time." Sony, 464 U.S. at 421. The Supreme Court found unauthorized time-shifting to be a noninfringing fair use because of its noncommercial nature and because the plaintiffs had not shown harm to their economic market as a result of such use. Id. at 447-56.

56. Id. at 442.

57. Id.
58. Dogan, supra note 12, at 945-46 (interpreting Sony's primary objective as preventing interference by copyright holders in unrelated markets).

59. Of course, this is not the only plausible reading of Sony, and others have argued that Sony proscribes interference with technologies that may have been designed for infringing purposes, but whose other, potentially non-infringing purposes have yet to be fully realized. In an insightful article, Mark Lemley and R. Anthony Reese advocate such an approach and contend that the recent trend toward broader liability against technology providers will stifle innovation. Mark A. Lemley & R. Anthony Reese, Stopping Digital Copyright Infringement

^{50.} See, e.g., Williams & Wilkins Co. v. United States, 172 U.S.P.Q. 670 (Ct. Cl. 1972) (holding most library photocopying to be fair use).

^{51.} Sony, 464 U.S. 417 (1984).

^{52.} Universal City Studios, Inc. v. Sony Corp. of Am., 480 F. Supp. 429, 432 (C.D. Cal. 1979). Plaintiffs also made claims for vicarious liability, which the trial rejected and the Ninth Circuit did not reinstate. Id. at 461; Universal City Studios, Inc. v. Sony Corp. of Am., 659 F.2d 963, 974-76 (9th Cir. 1982) (reversing on contributory infringement claim only).

^{53. 659} F.2d at 974-76.

Photocopying machines, general purpose computers, and operating systems typify technologies that were developed for primarily noninfringing objectives. To subject their developers to copyright liability merely because they play a facilitating role in infringement would give copyright holders control over the design, pricing, and ultimately the availability of products that have little to do with their limited legal entitlement.⁶⁰ Such a result would stretch copyright well beyond its inducement objectives, would deprive individuals of fair use rights, and might even be unconstitutional.⁶¹

60. Copyright law offers the possibility of both monetary and injunctive relief, so that if copyright holders could prevail on contributory infringement claims against technology developers, they could generally shut down the technology. *See Sony*, 464 U.S. at 440-42 (noting importance of staple article of commerce doctrine in both patent and copyright law, because while a "finding of contributory infringement does not, of course, remove the article from the market altogether[,] it does... give the [intellectual property holder] effective control over the sale of that item"); *see generally* A&M Records, Inc. v. Napster, Inc., 284 F.3d 1091 (9th Cir. 2002) (affirming injunction against file-sharing provider that required it to screen music files after receiving notice from copyright holders).

The *Sony* dissenters, as well as the Ninth Circuit, had acknowledged this problem, but believed that its solution lay in narrowly tailored relief, rather than denying a cause of action against those whose products facilitate infringement. *See* 464 U.S. at 499 (Blackmun, J., dissenting) ("I concur... in the Court of Appeals' suggestion that an award of damages, or continuing royalties, or even some form of limited injunction, may well be an appropriate means of balancing the equities in this case.").

Without Stopping Innovation (working paper on file with author). See also Brief Amici of 40 Intellectual Property and Technology Law Professors Supporting Affirmance, Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd., Nos. 03-55894 & 03-55901, at 6-8 (filed Sept. 26, 2003) (offering policy rationales for a standard focused on potential, rather than existing, uses); Amended Brief of Amicus Curiae Copyright Law Professors in Support of Reversal, A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004 (9th Cir. 2001) ("The balance rests on the side of permitting new technology, not stifling it."). Compare Ariel B. Taitz, Note, Removing Road Blocks Along the Information Superhighway: Facilitating the Dissemination of New Technology by Changing the Law of Contributory Copyright Infringement, 64 GEO. WASH. L. REV. 133 (1996) (proposing the imposition of liability on makers of technology with "non-trivial infringing uses"); cf. In re Aimster Copyright Litig., 334 F.3d 643, 652-53 (7th Cir. 2003) (rejecting interpretation of Sony that focuses on potential, rather than actual, use of peer-to-peer technology). While some language in Sony supports this interpretation, e.g., Sony, 464 U.S. at 442 (stating that the product "need merely be capable of substantial non-infringing uses"), the Supreme Court's focus on non-interference with non-infringing markets suggests that liability may be appropriate against makers of technologies whose non-infringing applications are insufficient to support their development. Because the Court found that the Betamax VCR's primary use was non-infringing, moreover, its discussion of the requisite level of non-infringing use was dictum. See id. at 423 (concluding that the combination of authorized and unauthorized time-shifting constituted the "primary use [of the Betamax] for most owners").

^{61.} See Eldred v. Ashcroft, 123 S. Ct. 769, 790 (2003) (finding First Amendment scrutiny unnecessary when "Congress has not altered the traditional contours of copyright protection," but suggesting that First Amendment concerns may arise when "copyright's built-in speech safeguards" are disturbed).

Despite the dire predictions of the movie industry, moreover, the Betamax did not evolve into its "Boston strangler;"62 to the contrary, the videocassette market became a tremendous revenue generator for the movie industry.⁶³ Nor did photocopying machines or cassette recorders destroy the book or music publishing industries.⁶⁴ Each of these content sectors managed to survive, despite the increased decentralization of copying activities and the narrow standards of liability against those who facilitated such copying. Their survival may well have resulted from the good will of consumers, who would just as soon buy an original as make or obtain a copy from an unauthorized source.⁶⁵ More likely, however, the consumer copying technologies did not displace traditional publishers because originals remained superior in quality and easier to obtain, and because the new technologies did not alter the fundamentally tangible, costly, and public nature of the distribution process. Certainly, some copying and sharing went undetected, but such acts required access to an existing physical copy of the work. And public distribution of these copies, at any meaningful scale, required investment and visibility.⁶⁶ Just as before, copyright holders could avoid infringement floods by focusing on tangible, public transactions involving their intellectual property; at the same time, individuals could engage in personal, non-commercial use of copyrighted works without eliminating core markets for content.⁶⁷

^{62.} See Hearings Before the Subcomm. on Courts, Civil Liberties, and the Administration of Justice of the House Comm. on the Judiciary, 97th Cong. 15-168 (1982) (testimony of Jack Valenti, President of the Motion Picture Association of America, Inc., contending that "the VCR is to the American film producer and the American public as the Boston strangler is to the woman home alone").

^{63.} See Adam Liptak, Is Litigation the Best Way to Tame New Technology?, N. Y. TIMES, Sept. 2, 2000, available at http://www.nytimes.com/library/tech/00/09/biztech/ articles/02napster.html (last visited Feb. 10, 2003) (noting that "video rental income now rivals box-office receipts" for the movie industry).

^{64.} To some extent, these technologies, like the VCR, have opened up new markets for copyrighted works. In the book publishing context, the Copyright Clearance Center (CCC) facilitates permissions for copying of published works, collects fees, and distributes royalties to publishers. *See* http://www.copyright.com (last visited Apr. 2, 2003); *see generally* Princeton Univ. Press v. Mich. Document Servs., Inc., 99 F.3d 1381, 1388 (6th Cir. 1996) (noting existence of licensing market in evaluating fair use defense).

^{65.} See Bartow, supra note 17 (suggesting that consumers generally prefer to purchase legal copies, if available on reasonable terms).

^{66.} See, e.g., RSO Records, Inc. v. Peri, 596 F. Supp. 849 (S.D.N.Y. 1984) (action against counterfeiters of copyrighted records and tapes).

^{67.} Copyright holders attempted, but failed, to pass legislation that would reverse the result in *Sony*, either through some levy on copying technologies or through adoption of a mandatory copy-protection standard. Congress thus deliberately rejected, at least at the time, a more expansive approach to cost-spreading in copyright law. The one narrow exception consisted of a tax on digital audio recording devices, which have largely been superseded by more general-use digital copying technologies. *See generally* GOLDSTEIN, *supra* note 33, at 157-64 (describing legislative efforts).

The common law model of copyright infringement, post-*Sony*, thus had three key features. First, it preserved the principal economic markets for copyrighted works by protecting against market-destroying uses of the copyrighted content—i.e., against infringement floods.⁶⁸ Second, it specifically contemplated some "leakage" into the public of the content protected by copyright, allowing individuals to use copyrighted works without permission when such use did not substantially displace demand for the content.⁶⁹ And third, the law allowed neutral technology markets to mature without interference by content owners. Under the Supreme Court's approach, neither technology developers nor their customers should have to endure higher costs or suboptimal products to protect third party copyrights. *Sony* thus preserved the status of contributory and vicarious liability as surgical tools for use against parties closely involved in another's infringement, rather than mechanisms for wholesale redistribution of the costs of copyright enforcement.

II. BURDEN ALLOCATION IN A DIGITAL AGE

The combination of digital technology and the Internet fundamentally changed the economic model of content dissemination. For the first time, individuals could make perfect copies of copyrighted content and distribute them globally at almost no cost. Because of the intimate relationship between digitization and the Internet, advocates, policymakers and scholars tend to treat them interchangeably and to assume that copyright law must address them together, if at all.⁷⁰ From a copyright perspective, however, the digital revolution divides into three distinct phases that challenge the existing copyright model in unique ways. The first two phases—digital content storage and the early Internet—altered the technology of reproduction and distribution, but arguably preserved enough of the attributes of copyright markets to make the copyright balance attainable through application of existing doctrine.

^{68.} See Sony, 464 U.S. 417, 451 (1984) ("A challenge to a noncommercial use of a copyrighted work requires proof either that the particular use is harmful, or that if it should become widespread, it would adversely affect the potential market for the copyrighted work.").

^{69.} See Sony, 464 U.S. at 451 (finding fair use when plaintiffs failed to show that noncommercial use of their television programs "would cause any likelihood of nonminimal harm to the potential market for, or the value of, their copyrighted works").

^{70.} The Hollings bill, for example, applies not only to technologies used to distribute content, but to "any hardware or software that (A) reproduces copyrighted works in digital form; (B) converts copyrighted works in digital form into a form whereby the images and sounds are visible and audible; or (C) retrieves or accesses copyrighted works in digital form and transfers or makes available for transfer such works to hardware or software described in subparagraph (B)." S. 2048, 107th Cong. Rec. S2272 (2002).

It is only the most recent development—file-sharing⁷¹—that directly challenges one of the key assumptions of pre-digital copyright: that by focusing on a narrow, visible core of content distributors, copyright holders could keep unauthorized use of their expression to a trickle, rather than a flood.⁷² This Part examines these three phases of the digital revolution and considers their impact on copyright's balance.

Digital technology—including software, replication and storage media, and various hardware formats—enables individuals to make perfect copies of digital files in their possession.⁷³ The high quality of these copies could arguably displace some of the demand for publisherauthorized versions of creative works.⁷⁴ Like the consumer copying technologies before it, however, digital technology alone did not alter the essentially centralized and public nature of large-scale content distribution. Digital copying, in other words, requires access to a copy, and before the Internet, copies were obtained either through friends and associates, from libraries, or through commercial actors who made them available for a fee. The personal-type copying might affect content markets, but arguably in the form of leaks, rather than floods.⁷⁵ And because the more commercial, depersonalized copying required scale and some level of public exposure, copyright holders could identify and

73. See CARL SHAPIRO & HAL R. VARIAN, INFORMATION RULES: A STRATEGIC GUIDE TO THE NETWORK ECONOMY 3 (1999) (noting low cost of production of digital copies of information goods).

74. Cf. id. at 55 (contending that displacement does not depend on perfect copies).

^{71.} For an explanation of the first well-known file-sharing technology, Napster, see A & M Records, Inc. v. Napster, Inc., 114 F. Supp. 2d 896, 905-08 (N.D. Cal. 2000), *aff'd in part, rev'd in part*, 239 F.3d 1004 (9th Cir. 2001).

^{72.} The music industry projected a six percent decline in sales in 2003, following similar declines for the three previous years. See Reuters, RIAA: ISPs Should Pay for Music File Swapping, CNET NEWS.COM, Jan. 18, 2003, available at http://news.com.com/2100-1023-981281.html (last visited Feb. 11, 2003). While the drop likely has not result entirely from file-sharing, there is evidence that at least some of the decline has resulted from the file-sharing services and other Internet downloads. See Study: CDs May Soon Be as Final as Vinyl, CNET NEWS.COM, Sept. 2, 2003, at http://news.com.com/2100-1027-5070177.html (noting Forrester Research study indicating that "20 percent of Americans engage in music downloading, and half of the downloaders say they are buying fewer CDs"); cf. John Borland, Music Industry: Piracy is Choking Sales, CNET NEWS.COM, Apr. 9, 2003, at http://news.com.com/2100-1027-996205.html (last visited Sept. 4, 2003) ("If the drop in music sales is undeniable, the industry's unwavering attribution of it to the effects of Internet piracy remains controversial.").

^{75.} Several factors support this view. First, because the acts of locating, obtaining, and copying physical versions of digital files require considerable effort and time, individuals might find it more attractive to purchase content through authorized channels. Second, people may willingly pay more for content if they know that they can make perfect copies and share them with family and friends. The resulting outward shift in the demand curve may make it possible for content providers to recover equal or greater profits from the distribution of digital works. (Thanks to Judge Williams for making this point at the Silicon Flatirons Symposium.) Third, many of those who make private copies do not value the work enough to purchase a copy at market prices, so the copyright owner has not lost a sale as a result of such copying.

pursue those who attempted it.⁷⁶ Digital *copying* therefore did not necessarily threaten the core balance struck by the Supreme Court in *Sony*.

Digital copying raised sufficient concern, however, to prompt Congress to pass the 1992 Audio Home Recording Act ("AHRA"). The AHRA required all digital audio recording devices to include a standard copy-protection technology that allowed only first-generation copies.⁷⁷ It also imposed a statutory royalty on such devices and on blank recording media used in such devices, with the proceeds to be distributed to copyright holders.⁷⁸ Congress thus showed itself willing to accept a compromise—allowing copyright holders some economic rights over technology markets—but only over a limited market with a clear relationship to copyrighted content.⁷⁹ Digital audio recording equipment, moreover, affected only the mechanism for copying, and left the dissemination variable unchanged. In any event, because computers have largely supplanted digital audio recording devices as the preferred

^{76.} E.g., Capitol Records, Inc. v. Wings Digital Corp., 218 F. Supp. 2d 280, 282 (E.D.N.Y. 2002) (suit involving claims of direct, contributory and vicarious infringement against parties "in the business of mastering and manufacturing audio compact discs, replicating compact discs and performing other services related to replication"). The lower costs associated with digital copying lowered the barriers to these commercial actors' entry into the music sales market, but did not alter the essentially public nature of their sales activities. See John Borland, RIAA Targets Small Stores' CD Copying, CNET NEWS.COM, Dec. 16, 2002, available at http://news.com.com/2100-1023-978096.html (last visited Feb. 11, 2003) (describing music industry anti-piracy initiative against small retailers, including convenience stores and gas stations, that were allegedly selling counterfeit music CDs). The software industry has had notable success in rooting out this type of market-threatening copying and distribution behavior. See, e.g., Dan Goodin, Microsoft Sues Resellers, CNET NEWS.COM, Jan. 28, 1998, available at http://news.com.com/2100-1001-207573.html?tag=rn (last visited Feb. 11, 2003) (describing action against resellers who were selling unlicensed versions of Microsoft software).

^{77. 17} U.S.C. § 1002(a). The AHRA limits itself to digital audio tapes and digital audio recorders. *See id.* § 1001(a) (defining "digital audio recording device" as a device "the digital recording function of which is designed or marketed for the primary purpose of, and that is capable of, making a digital audio copied recording for private use"); Recording Indus. Ass'n of Am., Inc. v. Diamond Multimedia Sys., 180 F.3d 1072, 1078 (9th Cir. 1999) (holding that definition of digital audio recording device does not include computers, whose "primary purpose" is not to make digital audio copies).

^{78. 17} U.S.C. §§ 1003-007. The statute sets forth a procedure for distribution of royalties to individuals and collective organizations, which the Librarian of Congress administers. See 17 U.S.C. §§ 1106-07; see also John R. Kettle III, Dancing to the Beat of a Different Drummer: Global Harmonization-and the Need for Congress to Get in Step with a Full Public Performance Right for Sound Recordings, 12 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 1041, 1068-69 (describing royalty administration system).

^{79.} Indeed, the restrictive scope of the AHRA has made it virtually irrelevant to the current environment, in which computers have replaced digital audiotapes as the recording medium of choice. See Brian Leubitz, Note: Digital Millennium? Technological Protections for Copyright on the Internet, 11 TEX. INTEL. PROP. L.J. 417, 432 (2003) (describing AHRA as "relatively unimportant and unsuccessful").

medium for recording music, the AHRA has little economic significance.⁸⁰

The most significant challenge to the copyright balance came with the advent of Internet-based content distribution. On the Internet, individuals could, for the first time, make digital works available cheaply and anonymously to millions of strangers around the world. No longer did distribution rely on infrastructure or on access to a physical copy of a work. The transaction costs associated with disseminating digital copies largely disappeared: to obtain a copy of a work, individuals needed only to find someone, somewhere in the world, who had made the material available on the Internet.⁸¹

From a copyright enforcement perspective, this change in distribution had three primary effects: first, it made it harder to identify individuals who disseminated copyrighted expression; second, it dramatically increased the number of such people; and third, it exploded the number of their recipients. Copyright holders could no longer capture their core markets by focusing on a tight circle of publishers who disseminated their works, nor could they take comfort in the knowledge that individual acts of sharing would have little market-destroying effect. The ease and potential reach of Internet-based distribution meant that end users with little resources or infrastructure could, for the first time, threaten market-destroying floods.

Notwithstanding their scale and relative decentralization, however, the first generation of Internet distribution models left copyright holders an alternative core on which to focus: the bulletin board service (BBS), Internet service provider (ISP), or host computers through which end users posted and located infringing content. Copyright holders turned their attention, in other words, toward the entities that facilitated the *distribution* of infringing content on the Internet, leaving alone (for the time being) the neutral copying technologies at the Internet's extremities. And they did so, at least at first, using the same contributory and vicarious liability theories that had failed them in *Sony*.

In contrast to their failures in cases like *Sony* in the 1980s, the content owners' legal strategies against Internet intermediaries largely succeeded. Despite some initial uncertainty, the case law in the mid-

^{80.} See, e.g., Copyright Office, 2002 Annual Report of the Register of Copyrights 56 (reporting only \$1.3 million in AHRA royalty fees for calendar year 2001, for distribution among all copyright holders).

^{81.} See Joseph P. Liu, Owning Digital Copies: Copyright Law and the Incidents of Copy Ownership, 42 WM. & MARY L. REV. 1245, 1255 (2001) ("Copies of copyrighted works can now be distributed in digital form, without the exchange of any physical object, without any title in physical property changing hands, and all indications suggest that this will only increase over time, as computer network capacities increase and compression technologies improve.").

1990s showed a growing trend toward imposing liability when Internet intermediaries became aware of a specific act of infringement and did nothing to stop it.⁸² In 1998, moreover, Congress passed the Digital Millennium Copyright Act, which provided immunity, under copyright, to online service providers that acted promptly to remove infringing content posted by their users⁸³ and that adopted policies to terminate repeat infringers.⁸⁴ While these tools certainly did not guarantee leakproof markets, they went a long way toward preventing a flood of infringement in the early years of the Internet.

The combination of judicial action and the DMCA safe harbors arguably preserved the three core objectives of infringement doctrine after *Sony*. First, the law empowered copyright holders to protect the broad contours of markets for their works by targeting and blocking public transactions in their copyrighted expression. Second, the law ensured at least the possibility that end users could continue to engage in fair uses of copyrighted works.⁸⁵ And finally, both the case law and the

^{82.} See, e.g., Religious Tech. Ctr. v. Netcom On-Line Communication Servs., Inc., 907 F. Supp. 1361 (N.D. Cal. 1995) (holding that Internet service provider that refuses to remove infringing content after receiving adequate notice of its infringing nature may be liable for contributory infringement); Sega Enters., Ltd. v. MAPHIA, 857 F. Supp. 679, 687 (N.D. Cal. 1994) (finding bulletin board service liable for contributory and vicarious copyright infringement, when its operators encouraged posting and download of infringing files); Sega Enters. v. Sabella, No. 93 Civ. 4260, 1996 WL 780560 (N.D. Cal. 1996) (same); see also Perfect 10, Inc. v. Cybernet Ventures, Inc., 213 F. Supp. 2d 1146, 1169-70 (C.D. Cal. 2002) (finding likelihood of success in contributory infringement claim against business that "markets the [infringing site's] brand through advertising, . . . pays webmasters commissions directly based upon the number of [infringing site's] users that register through the site, . . . provides technical and content advice, . . . reviews sites, and . . . attempts to control the quality of the 'product' it presents to consumers as a unified brand").

While some early cases found ISPs liable for direct infringement, *e.g.*, Playboy Enters., Inc. v. Frena, 839 F. Supp. 1552 (M.D. Fla. 1993); Sega Enters., Ltd. v. MAPHIA, 857 F. Supp. 679, all of the decisions after *Netcom* focused on contributory and vicarious liability, agreeing with the *Netcom* court that direct liability should require some volitional act by the alleged infringer that is absent when copies are made automatically by an ISP's server. *See Netcom*, 907 F. Supp. 2d at 1369 (direct infringement is inappropriate because "designing or implementing a system that automatically and uniformly creates temporary copies of all data sent through it is not unlike that of the owner of a copying machine who lets the public make copies with it"). Indeed, even the *MAPHIA* court subsequently "clarified" its holding to conform to *Netcom*, agreeing that direct infringement required some element of volition. *See* Sega Enters., Ltd. v. MAPHIA, 948 F. Supp. 923, 932 (N.D. Cal. 1996)).

^{83.} See 17 U.S.C. § 512(c) (providing limited immunity to service providers "for infringement of copyright by reason of the storage at the direction of a user of material that resides on a system or network controlled or operated by or for the service provider").

^{84.} See 17 U.S.C. § 512(i). Qualifying ISPs must also "accommodate[]" and not "interfere with standard technical measures" used by copyright holders to identify or protect copyrighted works. *Id.*

^{85.} The *Netcom* court held that an ISP could avoid liability if it could show a good faith belief that a user's allegedly infringing behavior was protected under the fair use doctrine. *Netcom*, 907 F. Supp. at 1374 ("Where a BBS operator cannot reasonably verify a claim of infringement, either because of a possible fair use defense, the lack of copyright notices on the

statute protected the basic, neutral end-to-end technology of the Internet against interference by copyright holders. The law's surgical focus on specific instances of infringing postings protected "the rights of others"—*i.e.*, the non-infringing public—"freely to engage in substantially unrelated areas of commerce."⁸⁶

No sooner did the dust settle on the first round of legal battles, however, than the next generation of Internet distribution models arose: end-to-end file-sharing.⁸⁷ File-sharing technologies such as Napster, Gnutella, and KaZaA further decentralized and revolutionized Internet distribution. Whereas previous Internet distribution occurred either through directed communications to known recipients (such as email) or through some centralized mechanism for posting and downloading information (such as bulletin board services or websites stored on central servers), file-sharing services enabled users to identify and acquire files held by strangers, without relying on static Internet postings or processing by central servers.⁸⁸ As Judge Posner described it, "In principle, therefore, the purchase of a single CD could be levered into the distribution within days or even hours of millions of identical, nearperfect... copies of the music recorded on the CD-hence the recording industry's anxiety about file-sharing services oriented toward consumers of popular music."89 And while the first wave of file-sharing services relied on centralized servers to provide directories of currently

copies, or the copyright holder's failure to provide the necessary documentation to show that there is a likely infringement, the operator's lack of knowledge will be found reasonable and there will be no liability for contributory infringement for allowing the continued distribution of the works on its system."). Under the DMCA, after an online service provider receives notice of alleged infringement by one of its subscribers, the subscriber has the opportunity to respond by filing a counternotification and "put back" demand. 17 U.S.C. § 512(g). Following such a counternotification, the service provider must reinstate the material unless the copyright holder files a court action against the subscriber. *Id.*

^{86.} Sony, 464 U.S. 417, 441-42 (1984); see generally Netcom, 907 F. Supp. at 1377-78 (noting that First Amendment concerns would arise "[i]f Usenet servers were responsible for screening all messages coming through their systems," but finding such concerns alleviated when "absent evidence of knowledge and participation or control and direct profit, [ISPs] will not be contributorily or vicariously liable").

^{87.} The popular and academic interest in file-sharing services has spawned a wealth of literature on the subject. For a particularly helpful introduction, see Tim Wu, *When Code Isn't Law*, 89 VA. L. REV. 679 (2003); see also Michael Slusarz, *Designing Networks to Avoid Liability: Copyright Infringement for the Second Generation of Peer-to-Peer Software* (draft on file with author).

^{88.} The distinguishing feature of file-sharing services is that they enable users to exchange files directly, without passing through some centralized server. Judge Posner describes their function as "similar to that of a stock exchange, which is a facility for matching offers rather than a repository of the things being exchanged (shares of stock). But unlike transactions on a stock exchange, the consummated 'transaction' in music files does not take place in [a] facility" maintained by the file-sharing service. In re Aimster Copyright Litig., 334 F.3d 643, 647 (7th Cir. 2003).

^{89.} Id. at 646.

available files,⁹⁰ later generations are maintained and circulated by a network of anonymous individuals around the world.⁹¹

The increasing decentralization of file-sharing services has both legal and practical implications for copyright holders. Legally, the decentralization arguably weakens copyright claims against the "intermediaries" that facilitate peer-to-peer infringement-in this case, the distributors of file-sharing software. Napster, the first widely used file-sharing program, found itself vulnerable to contributory and vicarious liability claims largely because it kept a centralized index that, among other things, enabled it to identify and remove infringing music files.92 Much of the post-Napster file-sharing software deliberately eschews such indices, and its providers play little ongoing role in facilitating transactions between users.⁹³ At least one district court has found that, in the absence of such ongoing, interactive relationships with their users, providers of the Grokster and KaZaA file-sharing software are immune from copyright suits under Sony.⁹⁴ And while the Seventh Circuit upheld an injunction against a file-sharing service in the Aimster case, the defendants there, as in Napster, offered more than a standalone

^{90.} See A & M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1022 (9th Cir. 2001) (holding that centralized directory made it possible for Napster to block trading of infringing files identified by music copyright owners).

^{91.} See Joseph A. Sifferd, Note, The Peer-to-Peer Revolution: A Post-Napster Analysis of the Rapidly Developing File-Sharing Technology, 4 VAND. J. ENT. L. & PRAC. 92, 107 (2002) (noting that judicial decisions against developers of file-sharing software "will not stop the pure peer-to-peer networks already in existence").

^{92.} The index, and the resulting ability of Napster to purge infringing files identified by the music industry, were critical to the court's resolution of both the contributory and vicarious liability claims. See Napster, 239 F.3d at 1022 (upholding finding of contributory infringement, when "[t]he record supports the district court's finding that Napster has actual knowledge that specific infringing material is available using its system, that it could block access to the system by suppliers of the infringing material, and that it failed to remove the material"); *id.* at 1024 (finding that Napster had the right and ability to police its users' infringement, as required for vicarious liability, because of its "ability to locate infringing material listed on its search indices, and the right to terminate users' access to the system").

^{93.} See Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd., 259 F. Supp.2d 1029, 1036-46 (C.D. Cal. 2003); see also Tim Wu, When Code Isn't Law, 89 VA. L. REV. 103, 108 (2003) ("While eliminating intermediaries presents a serious technical challenge, the goal is clear-to remove the enforcement efficiency of a gatekeeper system, leaving primary enforcement against end-users as the only option.").

^{94.} Grokster, 259 F. Supp.2d at 1041 (finding no contributory infringement by providers of file-sharing software that played no continuing role in facilitating exchange of files between users: "In contrast, Napster indexed the files contained on each user's computer, and each and every search request passed through Napster's servers."); *id.* at 1045 (rejecting vicarious liability claim because "unlike in *Napster*, there is no admissible evidence before the Court indicating that Defendants have the ability to supervise and control the infringing conduct (all of which occurs *after* the product has passed to end-users)").

software project: their servers continually facilitated searches and fileswapping transactions by their users.⁹⁵

Even if the law could technically reach distributors of decentralized peer-to-peer software, however, a litigation strategy focused solely on the software would arguably have little effect on its availability.⁹⁶ Because truly decentralized peer-to-peer software does not rely on the continued operation of any centralized server, it is difficult to recapture after being released to the public. Each generation of file-sharing software, moreover, poses unique legal challenges that take time to resolve. Given the mismatch between the speed of technology and the pace of litigation, it seems unlikely that copyright holders will rein in the file-sharing phenomenon through legal efforts aimed at the software.⁹⁷

The law could respond in a number of ways. For one thing, policymakers could opt for copyright abandonment, concluding that

96. Compare Napster, 239 F.3d at 1022 (affirming contributory infringement ruling against Napster based on finding that "Napster has *actual* knowledge that *specific* infringing material is available using its system, that it could block access to the system by suppliers of the infringing material, and that it failed to remove the material"), and *id.* at 1024 (finding vicarious liability appropriate when Napster had "the ability to locate infringing material listed on its search indices, and the right to terminate users' access to the system"), with Grokster, 259 F. Supp.2d at 1037 (refusing to impose contributory liability against provider of software that enabled, but did not centrally control, file-sharing network, because "in order to be liable under a theory of contributory infringement, [defendants] must have actual knowledge of infringement at a time when they can use that knowledge to stop the particular infringement"); *id.* at 1045 (finding no vicarious liability when defendants "provide software that communicates across networks that are entirely outside Defendants' control").

^{95.} In re Aimster Copyright Litig., 334 F.3d 643, 651-52 (7th Cir. 2003). Judge Posner's opinion took issue with the Ninth Circuit's interpretation of *Sony*, finding that the *Napster* court improperly "suggest[ed] that actual knowledge of specific infringing uses is a sufficient condition for deeming a facilitator a contributory infringer." *Id.* at 649 (quoting 2 PAUL GOLDSTEIN, COPYRIGHT § 6.1.2, p. 6:12-1 (2d ed. 2003)). Despite this apparent rekindling of *Sony*, however, the Seventh Circuit went on to suggest that even technologies with substantial non-infringing applications might require redesign, if their infringing applications are substantial. *See id.* at 653 ("Even when there are noninfringing uses of an Internet file-sharing service, . . . if the infringing uses are substantial then to avoid liability as a contributory infringer the provider of the service must show that it would have been disproportionately costly for him to eliminate or at least reduce substantially the infringing uses."); *see also id.* at 651-52 (rejecting interpretation of *Sony* focused on potential, rather than actual, non-infringing applications).

^{97.} See id; see also Anna Wilde Mathews & Charles Goldsmith, A Global Journal Report: Music Industry Faces New Threats on the Web, WALL ST. J., Feb. 21, 2003, at B1 (noting that peer-to-peer networks are increasingly locating in jurisdictions where their behavior will escape copyright scrutiny). As Glynn Lunney points out, the steady growth of bandwidth will only exacerbate the increasing rift between file-sharing technology and legal efforts to stop it. See Lunney, supra note 17, at 825-26 (contending that, with the increased dispersion of copying technology, together with bandwidth expansion and lower costs associated with copying and distribution, "unauthorized sharing between private individuals through the Internet, which today is a relatively minor problem reaching only musical works, sound recordings, and certain computer programs, threatens to become a serious problem for digital works of authorship more generally").

copyright serves little function in a digital environment.⁹⁸ A number of scholars have proposed abandonment, particularly in industries such as music, where artists frequently get a scant share of the proceeds from the sale of copies of their works.⁹⁹ While a full critique of this option is beyond the scope of this Article, abandonment is unlikely to preserve incentives in content industries requiring sustained investment;¹⁰⁰ perhaps more significantly, it eliminates the possibility that artists could, someday, profit from distribution through platforms that give them a more equitable share of the value of their works.¹⁰¹

Even those who believe in the continued relevance of copyright, however, differ on how to achieve copyright's goals in the current technological environment. While competing proposals divide on a number of different axes, one area of disagreement strikes me as fundamental: whether the current technological environment justifies a shift away from the direct infringement model and toward one that reallocates copyright's burdens among a broader class of individuals and technologies. The reallocation proposals differ in motivation and effect, but share a common skepticism about the suitability of common law tools for preserving copyright's balance in the digital age.

The first reallocation scheme appears in Senator Hollings' proposed Consumer Broadband and Digital Television Promotion Act.¹⁰² The Hollings legislation seeks to speed the growth of broadband by assuring secure delivery of digital content. Absent a standard security technology

101. See Ginsburg, supra note 9, at 1646-47 ("The more self-publication offers realistic prospects of remuneration for authors, the more likely we are to see an increase in the volume and diversity of works of authorship, as authors will be able to bypass the gatekeeping functions of publishers and other intermediaries.").

^{98.} Netanel calls this option "digital abandon." See Netanel, supra note 15, at 55-57.

^{99.} See, e.g., Ku, supra note 16.

^{100.} See Neil Weinstock Netanel, Copyright and a Democratic Civil Society, 106 YALE L.J. 283, 288-89 (1996) (arguing that "sustained works of authorship'-books, articles, films, songs, and paintings-form a central part of democratic discourse, and that a robust copyright is a necessary (though not necessarily sufficient) condition both for the creation and dissemination of that expression and for its independent and pluralist character"). Even if it does not ultimately reduce incentives to create such works, abandonment may have the effect of deterring copyright holders from making them available in new formats. See Jane C. Ginsburg, Putting Cars on the Information Superhighway: Authors, Exploiters and Copyright in Cyberspace, 95 COLUM. L. REV. 1466, 1499 (1995) (contending that "[t]he viability of cyberspace as a medium for the consensual communication and creation of sustained works of authorship-real 'cars,' not simply conversations, data of the day, or pirated postings-will depend on authors' and copyright owners' confidence" that online copyright issues "will find solutions that will meet the needs of both authors and users"); Graeme W. Austin, Does the Copyright Clause Mandate Isolationism?, 26 COLUM. J. L. & ARTS 17, 46 & n. 196 (2002); see also Neil Weinstock Netanel, Locating Copyright within the First Amendment Skein, 54 STAN. L. REV. 1 (2001) (lauding copyright's "structural effect" of "subsidizing a robust speech sector, consisting of authors, publishers, and media enterprises that need not rely on potentially censorial government subsidies in order to be heard").

^{102.} S. 2048, 107th Cong., 2d Sess. (2002).

to protect content, the argument goes, copyright holders will not make their most valuable works available on-line, and consumers will accordingly have little need for greater bandwidth. The solution, in Senator Hollings' view, is to mandate that standard security technology appear in virtually every new computer-related product.¹⁰³

The Hollings bill would transform the burden allocation that characterized copyright law under *Sony*. Whereas previously, the law imposed the costs of copyright compliance only upon content users and their close associates,¹⁰⁴ the Hollings model would charge the entire high-technology community with an affirmative responsibility to prevent unauthorized use of copyrighted material.¹⁰⁵ It would arrest technology by imposing a uniform government standard.¹⁰⁶ It would burden all

^{103.} The bill would require every "digital media device" distributed in the United States to include standard security technology to protect against the unauthorized use of copyrighted works. *Id.* §§ 3, 5. "Digital media devices" include any hardware or software that retrieves, transfers, converts, or reproduces copyrighted content. *Id.* § 9. The standard security technology would be decided by participating industry groups or, barring their consensus, by the Federal Communications Commission. *Id.* § 3. Theoretically, this system would protect against infringing file-sharing, because content files would travel with watermarks or other code that set limits on their use, and end users' computers would identify and honor that code. Realistically, even this rigorous security system would be vulnerable to hackers who would remove the code and redistribute the underlying content. *See* Netanel, *supra* note 15 (noting vulnerability of security technologies); *see also* Jim Hu, *Hollywood Sets Stage for Piracy Battle with PC Industry*, CNET NEWS.COM, Aug. 7, 2002, *available at* http://news.com.com/2009-1023-9468672.html (last visited Sept. 29, 2003) ("Even if encryption technologies are required by law, their endurance remains an open question.").

^{104.} The Digital Millennium Copyright Act modified this model somewhat by prohibiting the use or distribution of tools that could circumvent copy protection schemes. The DMCA, however, consciously avoided imposing any obligation on technology developers to include specific copy protections in their products. *See* 17 U.S.C. § 1201(c)(2) ("Nothing in this section shall require that the design of, or design and selection of parts and components for, a consumer electronics, telecommunications, or computing product provide for a response to any particular technological measure").

^{105.} As described in a letter to Senator Hollings from the United States Association for Computing Machinery (USACM): "Devices as disparate as electronic cameras, wrist watches, electric pianos, televisions, ATM machines, cell phones, home security systems, and medical equipment (among many examples) all process and display information electronically. Under the proposed legislation, all would be required to support anti-copying protocols." *See* Letter to Senator Ernest F. Hollings from United States Association for Computing Machinery, Sept. 26, 2001, *available at* http://www.acm.org/usacm/SSSCA-letter.html (hereinafter "USACM letter") (last visited Sept. 29, 2003). This expansive reach runs counter to the Supreme Court's insistence, in *Sony*, that copyright not burden free access to markets "substantially unrelated" to copyright infringement. *Sony*, 464 U.S. 417, 441-42 (1984).

^{106.} For this reason, among others, a consortium of copyright holders and technology companies recently announced its opposition to Hollings-like legislation. The consortium, which includes the Recording Industry Association of America, the Business Software Alliance, and the Computer Systems Policy Project, released a seven-point list of "policy principles" that called for marketplace solutions to copy-protection challenges and pointed to education, publicity, and private enforcement actions as the core strategies for reducing infringement. See Press Release, Business Software Alliance, *Recording, Technology Industries Reach Groundbreaking Agreement on Approach to Digital Content Issues* (Jan.

consumers with the inevitable loss of speed and efficiency that the mandated technology would entail.¹⁰⁷ Depending on which security measures were ultimately adopted, moreover, the new law could threaten fair use rights and put the government imprimatur on copy-protection technology designed to prevent leaks, rather than floods.¹⁰⁸ Essentially, the Hollings proposal would fortify copyright holders' arsenal at the expense of technology and technology users. Rather than the surgical approach called for by *Sony*, it would opt for a bludgeon.

At the other end of the spectrum from the Hollings scheme stands a series of compulsory licensing and levy proposals, described most convincingly by Professor Neil Netanel.¹⁰⁹ Whereas the Hollings model would maintain a system of exclusive rights but would insist that technology developers help to enforce them, the levy approach would abandon exclusive rights (at least for certain works in certain media) and replace them with a system of technology-funded subsidization. As envisioned by Professor Netanel, the levy would apply to "commercial providers of all consumer products and services the value of which, the Copyright Office determines, P2P file swapping substantially enhances."¹¹⁰ A consortium of technology and copyright interests would decide upon appropriate levies for various technologies, and the proceeds would be allocated to copyright holders in an amount bearing some

^{14, 2003),} available at http://www.bsa.org/usa/press/newsreleases//2003-01-14.1418.phtml?type=policy (last visited Sept. 29, 2003); see also Declan McCullagh, *Copyright Truce Excludes Key Voices*, CNET NEWS.COM, Jan. 15, 2003, available at http://news.com.com/2100-1023-980671.html (last visited Feb. 11, 2003).

^{107.} See USACM letter ("Inclusion of anti-copying technology in general purpose equipment-including real-time computing devices used in traffic control, air flight control, medical equipment, and manufacturing-adds to their complexity and potential for failure. Unexpected interactions with other code, and accidental activation of protection protocols cannot be ruled out in every case, and in many venues the potential for damage is extreme.").

^{108.} See Hearing on Protecting Content in a Digital Age, supra note 19, at 4-5 (statement of Robert A. Perry of the Home Recording Rights Coalition) (contending that content owners have sought copy protection standards that would prevent consumers from engaging in *Sony*-type home copying of off-air broadcasts).

^{109.} See Netanel, supra note 15; see also William T. Fisher, A Royalties Plan for File Sharing, CNET NEWS.COM, July 11, 2003, at http://news.com.com/2010-1071-1024856.html (last visited Sept. 4, 2003) (proposing compulsory licensing scheme for peer-topeer file trading); cf. Brandon Mitchener, German Mediator Recommends Copyright Levy on Computers, WALL ST. J. ONLINE, Feb. 5, 2003, available at http://online.wsj.com/article/ 0,,SB1044385225838491533,00.html (last visited Feb. 5, 2003) (describing existing European levies on recording devices, as well as recent recommendation by German mediator that levies be assessed on PCs and distributed to copyright owners through existing collecting societies). But see P. Bernt Hugenholtz, Lucie Guibault & Sjoerd van Geffen, The Future of Levies in a Digital Environment: Final Report (2003), available at http://www.ivir.nl/publications/other/ DRM%20Levies%20Final%20Report.pdf (last visited Sept. 29, 2003) (opposing the expansion of copyright levies in Europe).

^{110.} Netanel, *supra* note 15, at 32.

relationship to the relative popularity of their works on file-sharing networks.

The levy proposal would arguably preserve the essential objectives of common law copyright. It would ensure some economic reward to content creators; it would protect the public's ability to engage in personal and other fair uses of copyrighted works; and it would allow—indeed, encourage—the growth of new technological platforms for content delivery. In the abstract, then, the model has significant appeal.

Despite these advantages, however, the levy model poses a number of challenges and imposes significant ongoing costs. The few existing compulsory licensing experiments in copyright law have faced criticism as inflexible, unwieldy, and non-responsive to changes in the way that people use and respond to creative content.¹¹¹ The task of determining and allocating royalties has confounded those charged with it, even in situations involving a discrete group of players, such as music copyright holders and digital broadcasters who play their works.¹¹² These difficulties may swell to the breaking point in a compulsory licensing scheme broad enough to encompass all technologies that benefit from file-sharing networks and all creative content traded on such networks.¹¹³

^{111.} See, e.g., Jane C. Ginsburg, Copyright and Control over New Technologies, 101 COLUM. L. REV. 1613, 1642-45 (2001) (describing problems with statutory royalty and levy schemes); Gordon, supra note 32, at 858-59 (outlining problems with compulsory licensing schemes generally); Robert P. Merges, Contracting Into Liability Rules: Intellectual Property Rights and Collective Rights Organizations, 84 CAL. L. REV. 1293, 1308-1316 (1996) (criticizing the mechanical license and other compulsory licensing regimes in intellectual property law); Mark A. Lemley, Dealing with Overlapping Copyrights on the Internet, 22 U. DAYTON L. REV. 547, 583 (1997) (noting unwieldiness of cable and satellite retransmission compulsory license rules, and contending that any corollary on-line would be even more complex); see also Jenna Greene, Royalty Arbitration Targeted on Hill: Congress Thought it had Found a More Efficient Way to Decide Copyright Royalties. Now that Reform is Under Question., LEGAL TIMES, Apr. 21, 2003, at 1 (cataloguing shortcomings of past copyright royalty proceedings).

^{112.} See Royalty Rate Is Set for Web Use, WALL ST. J., Apr. 4, 2003, at B5 (describing temporary truce in longstanding dispute between Internet radio operators and labels and artists); Jim Hu, Webcasters, RIAA Propose New Royalties, CNET NEWS.COM, Apr. 3, 2003, available at http://news.com.com/2100-1027-995470.html (last visited May 14, 2003).

^{113.} This is not to say that a compulsory license scheme would not present a feasible alternative for technologies that bear a more symbiotic relationship to infringement, including those that would not exist but for their infringing applications. *See* Dogan, *supra* note 12, at 958 n. 97 (suggesting damages, rather than injunctions, as appropriate relief against parties whose technologies owe their existence to infringement but have proven non-infringing applications). Congress took such an approach in the Audio Home Recording Act of 1996, *see infra* text at notes 77-78, and it could apply equally to other technologies primarily used for infringement. Whether particular copying and storage media owe their existence to infringement is an empirical matter that falls beyond the scope of this article.

Of course, it is equally plausible that the risk of legal liability, or the advantage of authorized access to content, will induce manufacturers of such technologies to engage in an ex ante, private bargaining process with copyright holders to ensure the protection of copyrighted content. *See, e.g.*, Lauren Wiley, *BPDG Proposes "Broadcast Flag" to Protect DVD*

Like the Hollings proposal, moreover, the levy scheme involves a subsidy by the non-file-sharing public. The subsidy operates in a somewhat different way—under the Hollings bill, the public would subsidize copyright holders' technological protection scheme, whereas the levy would involve a monetary payment from technology purchasers to copyright holders to compensate for unauthorized file-sharing. Nonetheless, because the tax would apply to a wide range of digital technologies without regard to their use by the purchaser, the levy would represent a wealth transfer from technology users generally toward those who get the most value from file-sharing activity.¹¹⁴

At root, both the Hollings and the levy proposals rest on an assumption that existing infringement standards no longer represent the optimal way to achieve copyright's objectives in an era of digital filesharing. Yet that assumption—made only a couple of years after Napster made its first appearance—deserves its own critical attention before serving as the departure point for a new copyright paradigm. Before we embark on a radical overhaul of copyright, we should make sure that the existing system is broken. Particularly, given the significant costs of the proposed alternatives, Congress should not turn to them without some clear evidence that existing legal tools cannot bring infringement to a manageable level.¹¹⁵

III. THE CASE FOR COMMON LAW

Existing law gives copyright holders an important tool that they have only recently begun to utilize in the file-sharing context: the direct infringement suit.¹¹⁶ While this alternative comes with its own risks and

Broadcasts, EMEDIA LIVE, June 24, 2002, available at http://www.emedialive.com/r10/2002/news0802_02.html (last visited May 14, 2003).

^{114.} For a more detailed discussion of the efficiency and fairness concerns associated with such a reallocation, see Lunney, *supra* note 17, at 855-56.

^{115.} Advocates of a levy contend that, even if existing standards *could* rein in infringement, they would do so at a tremendous cost, both in resources devoted to enforcement and in lost creative and consumptive consumer utility. *See infra* note 23. They have a point, but the levy proposals themselves implicate immense measurement, bureaucratic and transactional costs, making it difficult to say with confidence that their adoption would result in net benefits to creators and users of copyright works.

^{116.} Copyright holders have recently begun to utilize this strategy. See, e.g., Lynette Holloway, Recording Industry to Sue Internet Music Swappers, N. Y. TIMES, June 26, 2003, available at http://www.nytimes.com/2003/06/26/technology/26MUSI.html (last visited June 26, 2003) (reporting that recording industry association planned to file "at least several hundred civil and criminal lawsuits" against file-sharers within several weeks; see generally Michael Geist, 'Big Music' Set to Declare War on its Audience, TORONTO STAR, May 12, 2003, available at http://shorl.com/degotredralako (last visited May 12, 2003) ("the outcome of the [Grokster] case [discussed infra note 96] suggests that the recording industry may now turn its attention with renewed vigour toward the actual individuals who engage in file sharing, since a finding of copyright infringement is much easier to obtain in those cases").

costs, it offers a number of benefits relative to the overhaul options outlined above. Ultimately, its efficacy will turn on an untested empirical question: whether legal action against end users will deter enough filesharing to preserve an acceptable balance between copyright holders and the broader public. No one can predict the answer to that question, but experience, logic, and early returns suggest that the longstanding rules of direct infringement may represent the best hope for accommodating the competing objectives of copyright.

Perhaps the strongest argument for a direct infringement approach is that it has for centuries represented the most effective means of preserving copyright's incentives while maintaining the integrity of unrelated markets. By providing rights against those who actually value (and use) copyrighted works, infringement law allows copyright holders to receive rewards that bear some relationship to the value of their creations, while spreading the costs efficiently across those who consume them.¹¹⁷ A focus on direct infringers rather than on technological tools, moreover, ensures that technologies and services that have significant non-infringing applications can develop without interference by copyright holders.

A direct infringement model, of course, can achieve its economic objectives only if it leads to licensed transactions in copyrighted works.¹¹⁸ In the file-sharing context, this means that it must cause a critical mass of users to abandon file-sharing in favor of licensed music products.¹¹⁹ At first glance, such a result appears unlikely. Given the worldwide dispersion of file-sharing activities and the difficulty of pursuing end users, copyright holders can feasibly pursue only a tiny fraction of those

^{117.} *Cf.* Lunney, *supra* note 17, at 856 (noting that subsidization of infringement by noninfringing technology users can result in inefficiencies and inequities); Gordon, *supra* note 32, at 868-69 (explaining superiority of markets over courts in setting prices for use of intellectual property).

^{118.} Wendy Gordon has described this as one of the two critical requisites for the "asymmetric market failure" justification for intellectual property law:

The first condition is that authors and inventors would not be able to obtain much payment for their work in the absence of a rule that restrained strangers from copying, and, as a result, potential creators produce fewer works than the public would have been willing to pay for. ... The second condition for asymmetric market failure is that once a no-copy rule is put in place, licensing will evolve. In other words, the second condition is met if, in the presence of a copyright or some other rule restraining strangers from copying, markets will succeed, not fail.

Gordon, supra note 32, at 854.

^{119.} It need not convert all users; as discussed above, copyright has always been "leaky," and copyright holders have never appropriated all of the value of their works. Because the transaction costs associated with creation and distribution of copyrighted works are rapidly decreasing, moreover, it may take less of an economic incentive to encourage people to engage in these activities. *Cf.* Ku, *supra* note 16, at 300 (contending that the Internet eliminates the need for a financial incentive to distributors: "When content is distributed through the Internet, the public internalizes the costs of distribution.").

engaged in unauthorized file-sharing. Optimal deterrence theory suggests that in these circumstances, only an astronomical penalty would deter end users from engaging in file-sharing.¹²⁰

Despite these theoretical objections, a number of features of the current file-sharing environment make it plausible that direct infringement suits may reduce unauthorized file-sharing. For one thing, while file-sharing has changed the nature of content distribution from top-down to end-to-end, it appears to retain a certain centralized structure. Studies suggest that ninety percent of the content available on file-sharing networks is provided by a mere ten percent of the individuals on those networks.¹²¹ By identifying and pursuing some subset of those individuals, copyright holders could make other high volume sharers perceive a non-negligible risk of detection, and could potentially reduce the supply of unauthorized content.¹²²

Even the more moderate file-sharer may well be deterred by the threat of legal action, especially as legitimate alternatives to unauthorized file-sharing emerge. Through well-publicized lawsuits and criminal actions, copyright holders and government authorities can bring a message to the public that individuals engaged in file-sharing are violating the law, and face stiff penalties if they continue their behavior. This message—which the RIAA has only recently asserted with any conviction¹²³—was notably absent in the early peer-to-peer lawsuits,

^{120.} Under the traditional formula, "the ideal penalty (insofar as deterrence is concerned) equals the harm caused by the violation multiplied by one over the probability of punishment." Richard Craswell, *Deterrence and Damages: The Multiplier Principle and Its Alternatives*, 97 MICH. L. REV. 2185, 2186 (1999) (describing this prescription as "the multiplier principle" and citing sources). *See also* A. Mitchell Polinsky & Steven Shavell, *Punitive Damages: An Economic Analysis*, 111 HARV. L. REV. 869, 873-74 (1998) (contending that punitive damages should apply "only if an injurer has a chance of escaping liability for the harm he causes," and that penalties in such cases must "exceed compensatory damages so that, on average, they will pay for the harm that they cause"). *Cf.* Daniel W. Shuman, *The Psychology of Deterrence in Tort Law*, 42 U. KAN. L. REV. 115, 121 (1993) (citing research that "suggests that the uncertainty whether an injured person with a meritorious tort claim will pursue it undermines deterrence, and that the remote possibility of a large damage award does little to further the goal of deterrence").

^{121.} See John Borland, Record Labels Mull Suits Against File-Traders, CNET NEWS.COM, July 3, 2002, available at http://news.com.com/2100-1023-941547.html (last visited May 29, 2003) (citing study of Gnutella users conducted by Xerox's Palo Alto Research Center (PARC)).

^{122.} See id. ("Discouraging this 10 percent of 'providers' would go a long way in reducing the amount of content available through file-swapping networks, industry insiders say"); cf. German Police Swoop on File-Swappers, REUTERS, May 8, 2003, available at http://uk.news.yahoo.com/030508/80/dzjlm.html (describing arrest, by German police, of 25-year-old student who used a file-sharing network "to distribute over a million MP3 music files daily to some 3,000 individual users over a period of weeks").

^{123.} See, e.g., Declan McCullagh, Antipiracy Détente Announced, CNET NEWS.COM, Jan. 14, 2003, available at http://www.news.com.com/2100-1023-980633.html (last visited

which focused solely on intermediaries. There is solid precedent for such an end-user approach: the software industry has had measurable success in its campaign to reduce business software piracy through a strategy that combines high-profile, well-publicized legal actions with cease and desist letters to others suspected of infringement.¹²⁴ Likewise, many people who share music files might well stop doing so if they understood the illegality of their action and even the remote risk of legal sanction against them.

At the same time, widespread file-sharing would likely continue if the content industries failed to offer attractive alternatives in a format that appealed to the public. In the past, individuals deciding whether to use KaZaA balanced the benefits it brought them—free music, by the song, rather than a \$17 CD—against the costs of file sharing—the psychic cost of committing illegal behavior, together with the risk of getting caught. But as the industry changes the price structure of its offerings and makes music available in more discrete, affordable packages, the benefits of file-sharing are diminishing relative to purchase of legal content.¹²⁵ The early success of Apple's ITunes, which has already spurred numerous competing single-song distribution services, demonstrates that the cost-benefit analysis, for many consumers, will shift as attractive legal alternatives emerge. Indeed, the labels may ultimately decide to get involved in peer-to-peer networks themselves.¹²⁶

Given all of the benefits from direct infringement suits, it might seem odd that copyright holders have only recently begun to file them.

May 14, 2003) (describing announcement, by coalition of content providers, of plan to abandon legislative agenda in favor of public education and piracy actions).

^{124.} See Lisa M. Bowman, File-Traders in the Crosshairs, CNET NEWS.COM, July 15, 2002, available at http://news.com.com/2100-1023-943881.html (last visited May 29, 2003) (noting recording industry's plans to model antipiracy campaign after software industry's efforts); see also Study: Software Piracy on the Wane, CNET NEWS.COM, Aug. 5, 2003, available at http://news.com.com/2100-1012_3-5060288.html (last visited Aug. 6, 2003) (noting drop in unauthorized copying of business software, reported by software antipiracy organization); http://www.bsa.org/usa/press/education/ (press releases describing settlements of legal actions against businesses using unlicensed software).

^{125.} Apple Computer aggressively entered the market for per-song downloads in April 2003. See Pui-Wing Tam, Apple Launches Online Store Offering Downloadable Music, WALL ST. J., April 29, 2003, at B8. See also David Bank, RealNetworks Is Launching Its Own Online-Music Network Users; Few Reasons to Continue Therapy, WALL ST. J., May 28, 2003 (describing RealNetworks service that offers downloads of songs for 79 cents a track); Anna Wilde Matthews and Nick Wingfield, Apple's Planned Music Service for Windows Draws Rivals, WALL ST. J., May 9, 2003, at B1 (describing Apple Computer's planned iTunes for Windows and its anticipated competition in per-song download services); Brian Steinberg, Advertising: MovieLink's Ads Lure and Lampoon, WALL ST. J., Sept. 24, 2003, at B4 (describing advertising initiative by movie studios to promote authorized movie downloads).

^{126.} See Michael J. Wolf, *Musical Bandits*, WALL ST. J., May 1, 2003, at A18 (predicting that music labels will ultimately join forces with file-sharing services and convert them into revenue generators).

To some extent, their initial reticence may have resulted from legal and technological uncertainty over the feasibility of identifying and suing individual file-sharers. Recently, however, the technology has evolved to identify such individuals,¹²⁷ and courts have held that copyright holders may use the DMCA subpoena power to obtain personal information about them.¹²⁸ Particularly in light of the Ninth Circuit *Napster* decision, which found file-sharing straightforward infringement,¹²⁹ copyright holders have strong legal footing for direct infringement claims. More likely, the music industry's reluctance stemmed from a fear of alienating their customers—of suing the very individuals whom they hoped would buy their products.¹³⁰ As their intermediary suits falter and, at least in the short term, do little to stem the tide of online infringement, end-user legal actions have emerged as the only feasible short-term alternative.

In the summer of 2003, the Recording Industry Association of America (RIAA) took its first steps toward bringing actions against end users. It issued subpoenas for the identity of thousands of end users that it alleged were engaged in unauthorized trading of copyrighted music files.¹³¹ While several service providers and end users have challenged the subpoenas,¹³² others have complied, and in September the RIAA filed hundreds of suits against alleged file traders.¹³³ Although it is far too early to know whether these legal actions will have any lasting effect on

^{127.} *Recording Industry Reveals How Stealth, Sleuthing Track Piracy*, WALL ST. J., Aug. 28, 2003, at B5 (describing techniques used by RIAA to identify users engaged in infringing file-sharing).

^{128.} In re Verizon Internet Servs., Inc., 240 F. Supp. 24 (D.D.C. 2003); see also John Healey, Could Copyright Cops Be on your E-Trail?, NEWSDAY, Mar. 4, 2003, at A41 (describing technologies used to track down end users engaged in file-sharing); Amy Harmon, U.S. Backs Record Labels in Pursuit of Music Sharer, N.Y. TIMES, Apr. 21, 2003 (describing Justice Department brief in support of district court's decision in Verizon).

^{129.} A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004 (2001); *see also* Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd., 259 F. Supp. 2d 1029, 1034 (2003) (holding that downloading music files on file-sharing network infringes exclusive rights to distribute and reproduce copyrighted works).

^{130.} See Declan McCullagh, End of an Era for File-Sharing Chic?, CNET NEWS.COM, Aug. 25, 2003, at http://news.com.com/2010-1071-5067473.html (last visited Sept. 4, 2003) ("what the RIAA's lawyers and lobbyists fear, they admitted in private conversations . . ., is a public backlash").

^{131.} See Music Industry Gets Edge in Piracy Fight, WALL ST. J., July 21, 2003, at C13 (reporting on the 871 subpoenas already issued by the recording industry, "with roughly 75 new subpoenas being approved each day").

^{132.} See, e.g., Complaint in Pacific Bell Internet Servs. v. Recording Indus. Ass'n of Am., No. 03-3560 (N.D. Cal. filed Jul. 30, 2003), *at* http://www.eff.org/IP/P2P/PacBell_v_RIAA.pdf (last visited Sept. 4, 2003).

^{133.} See Nick Wingfield & Ethan Smith, Record Industry Files Suit Against 261 Music Uploaders; Move May Alienate Customers, WALL ST. J., Sept. 9, 2003, at B1 (noting suits filed against 261 individuals, each of whom allegedly offered over 1,000 files for download on file-sharing networks).

end-user behavior, some early surveys suggest that the threat of lawsuits is already reducing demand for file-sharing services.¹³⁴

Finally, copyright holders increasingly have allies in their efforts to stop uncontrolled file-sharing: universities and businesses whose students and employees are gobbling bandwidth with their rampant use of filesharing services. Unlike the providers of file-sharing technologies whose incentive lies in disseminating the software and encouraging as many file transfers as possible¹³⁵—these Internet access providers have a self-interest in policing their networks to prevent misuse of their bandwidth.¹³⁶ In some cases, that self-interest competes with an interest in satisfied customers, but as the legal status of unauthorized file-sharing becomes more settled and the cost of complying with subpoenas escalates,¹³⁷ many intermediaries have sought ways to push their users toward legal alternatives.¹³⁸ Some have addressed the problem by

^{134.} See Lisa M. Bowman, Are Swappers Scared of the RIAA?, CNET NEWS.COM, Aug. 21, 2003, at http://news.com.com/2100-1027-5066632.html (last visited Sept. 4, 2003) (describing report that showed sharp drop in file-sharing after the RIAA issued its subpoenas). But see Leslie Walker, Big-Time File Swappers Still at Large, THE WASHINGTON POST, Aug. 24, 2003, at F7 (noting report that showed recent reduction in households engaged in file swapping, but suggested that the RIAA's "legal campaign against file swappers is only scaring 'light downloaders' rather than the big fish the RIAA says it wants to catch").

^{135.} Grokster and other decentralized file-sharing networks make money on advertising: "The more individuals who download the software, the more advertising revenue [they] collect." Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd., 259 F. Supp. 1029, 1044 (C.D. Cal. 2003); *see also* Alex Frangos, *Eluding a New Web Hazard*, WALL ST. J., Mar. 4, 2003, at D1 (describing "spyware," software that automatically installs on the computers of those who download KaZaA and other file-sharing programs, tracks users' Web browsing, and generates pop-up ads that correspond to their perceived preferences).

^{136.} See John Borland, Businesses Boosting Anti-P2P Software, CNET NEWS.COM, Aug. 27, 2003, at http://news.com.com/2100-1035-5068950.html ("the discovery of activity that's taking up large amounts of bandwidth and exposing the company to potential legal liability is exactly the type of revelation that's persuading a growing number of companies to do something about file swapping"); John Borland, Labels Turn Guns on Workplace Pirates, CNET NEWS.COM, Feb. 13, 2003, available at http://news.com.com/2100-1023-984548.html?tag=bplst (last visited May 30, 2003) (quoting network security executive whose business clients are seeking to eliminate unauthorized file-sharing: "Bandwidth and resource consumption is the real driver for them.").

^{137.} The expense of complying with the subpoenas has driven some internet service providers to question the RIAA's recent subpoena drive, and at least one ISP has challenged the constitutionality of the subpoenas served by the RIAA. *See* John Borland, *ISP Group Challenges RIAA Subpoenas*, CNET NEWS.COM, Aug. 11, 2003, *available at* http://news.com.com/2100-1027-5062372.html (last visited Aug. 14, 2003) (noting legal challenges to subpoenas, as well as letter sent by Internet company trade association requesting dialog with RIAA and stating, "Smaller ISPs, whose limited resources are already being exhausted by legitimate law enforcement requests, simply cannot afford to underwrite legal fishing expeditions and still provide services for their customers.").

^{138.} See John Borland, Colleges Make Dent in Campus P2P, CNET NEWS.COM, Sept. 2, 2003, at http://news.com.com/2100-1027-5070407.html (noting "considerable progress" made by colleges and the entertainment industry in reducing infringement on campuses); John Borland, Colleges Explore Legal Net Music Setups, CNET NEWS.COM, Aug. 1, 2003, available at http://news.com.com/2100-1027-5059030.html (last visited Aug. 14, 2003)

limiting the bandwidth available to their users; others have begun to monitor the content transmitted to or from their network.¹³⁹ Congress has also pressured universities to discipline individuals engaged in widespread swapping of copyrighted files.¹⁴⁰ While it would offend the principles underlying *Sony* to impose a legal obligation upon these conduits to eliminate unauthorized file-sharing, their *de facto* role in diminishing the behavior cannot be ignored.

From the public's perspective, then, an infringement-oriented approach has a number of benefits. It preserves copyright incentives while maintaining pressure on content industries to make their products available on attractive terms to compete with—rather than eliminating— alternative forms of content delivery. It also continues the existing prohibition on copyright holder interference with technology,¹⁴¹ imposes the cost of access to content upon those who most value it, and maintains the principles of fair use.

Despite all of these advantages, I do not contend that the infringement-oriented approach will necessarily solve the current dilemma in copyright law. It raises its own problems, and only time will tell whether it will prove adequate to preserve copyright's incentives in a digital age. Nonetheless, some of the apparent flaws in the model are either inherent and appropriate, or easily addressed.

First, some might argue that direct infringement suits cannot adequately stem infringement over peer-to-peer networks—either because deterrence will not work or because legal actions will simply exacerbate the public animosity toward recording labels.¹⁴² To some extent, this is an empirical question whose answer depends on the costbenefit analysis of individual Internet users and the viability of alternatives to file-sharing. Only time will tell whether the combination

⁽describing initiative by university consortium to provide legal, on-campus alternative to unauthorized file-sharing: "The rampant use of file-swapping services has flooded [universities'] internal networks with unpredictable data traffic and has exposed their students and even the institutions themselves to the potential of legal liability. Sponsoring legitimate services would remove those headaches, some university administrators believe.").

^{139.} See John Borland, *Fingerprinting P2P Pirates*, CNET NEWS.COM, Feb. 20, 2003, *available at* http://news.com.com/2100-1023-985027.html (describing University of Wyoming's use of software that monitors content of data flowing through its network).

^{140.} See Declan McCullagh, Congress Targets P2P Piracy on Campus, CNET NEWS.COM, Feb. 26, 2003, available at http://news.com.com/2100-1028-986143.html (last visited May 29, 2003).

^{141.} See Ginsburg, Copyright and Control, 101 COLUM. L. REV. at 1645-46 ("[T]he conclusion that a compulsory license regime is better for authors than exclusive rights presumes that authors are obliged in practice to give up their rights to a publisher; it disregards the potential of digital media to free authors from the corporate distributors on whom they depended to bring their work to the public.").

^{142.} Wolf, *supra* note 126 ("Suing the people you hope will be your customers is always a dubious approach.").

of negative deterrence and positive draw from competing products will stem infringement to any significant degree. It bears emphasis, moreover, that copyright has never aspired to achieve perfect enforcement; it seeks only to preserve the basic contours of markets for copyrighted works. If direct infringement suits can achieve this in the new digital environment, then existing law will have proven itself capable of preserving the goals of copyright.

Second, a number of commentators have bemoaned the arbitrariness of a direct infringement strategy and the disproportional penalties faced by those unlucky enough to fall into the trap of copyright law.¹⁴³ These problems are inherent in any legal system that relies on deterrence to make up for imperfect enforcement. In the case of file-sharing, they may prove temporary; because the emergence of alternative legal products is coinciding with the content industries' enforcement campaign, an increasing number of individuals may well begin to make alternative choices.¹⁴⁴ Additionally, because the recording industry in these cases will likely take an approach similar to the software industry's recent campaigns, most of the targeted individuals will receive no more than notice through a cease-and-desist letter.

Third, while this Article has focused only on domestic strategies, piracy is a global phenomenon, and file-sharing is rampant around the world. Certainly, the global nature of the Internet presents immense enforcement challenges, but copyright holders seeking to capture global markets have always pursued infringers on a jurisdiction-by-jurisdiction basis. The strategies discussed in this Article apply equally across jurisdictions, and copyright holders seeking to preserve markets outside the United States should arguably pursue similar strategies in those jurisdictions.¹⁴⁵ Antipiracy campaigns in software, music, and movies are

^{143.} See, e.g., Lunney, supra note 17, at 851-52 ("At some point, a point copyright law may already have reached, the level of punishment required to deter private copying generally will simply become unjust."); Lichtman & Landes, supra note 6, at 408 (arguing against direct liability in cases involving widespread wrongdoing and low probability of detection, such as the direct actions against video game pirates in the 1980s: "because detection and litigation were so expensive, direct liability in this instance led to almost random penalties; of the millions of equally culpable computer users, only a handful were dragged into court. To many, the injustice of a legal right enforced that randomly outweighed whatever benefit those lawsuits offered.").

^{144.} If end-user deterrence succeeds in changing the social norms of peer-to-peer networks, the social costs and enforcement costs from an end-user campaign will fade over time. In contrast, the costs from the alternative schemes discussed in this Article-including the administrative costs of a levy, the efficiency losses due to subsidization of file-sharing users, and the Hollings scheme's imposition of suboptimal technology-would continue as long as either the levy or the digital rights management system was in place.

^{145.} In some jurisdictions, authorities have already begun enforcement efforts against individuals. *See, e.g.*, Jennifer Clark, *Italian Authorities Crack Down on File Sharing Over the Internet*, WALL ST. J. ONLINE, June 3, 2003, *available at* http://online.wsj.com/article/

already global, and copyright owners have to enforce their rights around the world. A global campaign against high-volume music traders may well have a deterrent effect, at least to some extent, and at least enough to cultivate demand for more attractive product offerings by music distributors.

Fourth, an infringement-centered approach, particularly one that relies on unilateral subpoenas, could be subject to abuse by copyright holders seeking personal identities for illegitimate purposes including harassment and strike suits. This concern is not an abstract one; a of Internet service providers have challenged number the constitutionality of the subpoenas issued by the RIAA in recent months, claiming that the subpoenas are technically inadequate and provide insufficient notice and opportunity for challenge by end users.¹⁴⁶ For the most part, these flaws are addressable, either through re-filing in appropriate venues, through compensation and notice by plaintiffs, or by a requirement that plaintiffs file suit to establish a case or controversy before issuing subpoenas for users' identity. In any event, policymakers can avoid abuse of subpoena power by interpreting the power narrowly and providing stiff sanctions for its bad faith use.¹⁴⁷

Finally, the press is already reporting the development of filesharing networks and other end-to-end technologies that will mask the identity of end users, making identification and pursuit of direct infringers much more difficult.¹⁴⁸ To the extent that these technologies evolve and present attractive alternatives, they will certainly alter the cost-benefit calculus of users, and they may well reduce the deterrent effect of a direct infringement approach. But it seems at least possible that the reduction will be slight. The more effort required to acquire an MP3 file, and the more it requires acts that appear to evade the law, the

^{0,,}SB105465539661755199,00.html (last visited June 4, 2003) (describing new Italian antifile-sharing legislation that enables "a vast police clampdown on file sharing").

^{146.} See Complaint in Pacific Bell Internet Servs. v. Recording Indus. Ass'n of Am., No. 03-3560 (N.D. Cal. filed Jul. 30, 2003), at http://www.eff.org/IP/P2P/PacBell_v_RIAA.pdf (last visited Sept. 4, 2003); see also John Borland, RIAA Turns Up Heat on Subpoena Fighter, CNET NEWS.COM, Aug. 27, 2003, at http://news.com.com/2100-1027-5069019.html (last visited Sept. 4, 2003) (describing legal challenge brought by a unanimous user to prevent her ISP from turning over information in response to RIAA subpoena).

^{147.} In a case involving the general subpoena power under the Federal Rules of Civil Procedure, for example, the Ninth Circuit recently found that an overbroad, abusive subpoena issued to an Internet service provider violated federal electronic privacy and computer fraud statutes. Theofel v. Farey-Jones, 341 F.3d 978, 984 (9th Cir. 2003) ("The subpoena power is a substantial delegation of authority to private parties, and those who invoke it have a grave responsibility to ensure it is not abused.").

^{148.} See, e.g., Online Music Pirates Dodge Capture, BBC NEWS, Mar. 18, 2003, available at http://news.bbc.co.uk/go/pr/fr/-/2/hi/technology/2860757.stm (last visited Mar. 19, 2003) (describing file sharers' increasing use of "port-hopping," or use of random ports, to evade detection by music industry and ISPs).

more individuals may be deterred and look to legal channels. The more sophisticated the technology, moreover, the higher the price in terms of convenience, efficiency, and usability.¹⁴⁹

Given the realistic possibility that deterrence will work, we should give the direct infringement strategy a chance before changing our entire copyright system. Recent history suggests that technology will continue to evolve in ways that enable infringers to avoid the costs of copyright, and that copyright holders cannot effectively control those technologies. Given that reality—and the costs that go along with any radical reallocation of copyright costs—policyholders should encourage copyright holders to pursue strategies to deter behavior at the ends and reduce demand for illegal content, rather than deluding themselves into thinking that the law can prevent leaks.

IV. CONCLUSION

Given the nascent state of peer-to-peer technology and the breakneck speed of technological development, no one can say with confidence whether, and to what extent, legal efforts will ever reduce infringement on file-sharing networks. Undoubtedly, this uncertainty has contributed to the clamor for a targeted legislative fix. Such reactive legislation, however, rarely solves cutting-edge dilemmas more effectively than common law solutions.¹⁵⁰

The common law of copyright infringement did not evolve accidentally, but through a deliberate balancing of the interests of copyright holders and those of the public. Before upsetting that balance in favor of a broader sharing of the costs of copyright by technology users generally, policymakers should have confidence that current infringement standards can no longer serve copyright's objectives in a digital age. This article has suggested some of the reasons to believe that they can, and therefore counsels caution.

^{149.} See Declan McCullagh, P2P's Little Secret, CNET NEWS.COM, July 8, 2003, at http://news.com.com/2100-1029-1023735.html (last visited Sept. 4, 2003) (noting decreased efficiency and usability of anonymous and fully decentralized file-sharing services).

^{150.} Cf. Suzanna Sherry, Haste Makes Waste: Congress and the Common Law in Cyberspace, 55 VAND. L. REV. 309 (2002).

THE POTENTIAL RELEVANCE TO THE UNITED STATES OF THE EUROPEAN UNION'S NEWLY ADOPTED REGULATORY FRAMEWORK FOR TELECOMMUNICATIONS

J. SCOTT MARCUS*

INTRODUCTION

Not so long ago, specific services and the associated networks were closely intertwined. Telecommunications networks delivered voice telephony. Broadcast systems delivered radio and television. The introduction of cable television and satellite transmission resulted in only a marginal increase in complexity.

Today, one can no longer say that the service and the network are inextricably intertwined. Voice telephony is delivered over wireline telecommunications, wireless, cable and the Internet. Radio and television programming are delivered over radio, cable and, to a limited but growing degree, the Internet. Indeed, the Internet is fundamental to the challenges of convergence, insofar as it totally decouples the application from the underlying mechanisms of transmission.

Convergence poses vexing problems for the regulator. In the US, the Communications Act of 1934¹ (the statute governing telecommunications regulation) provides for substantially different treatment for wireline, mobile wireless, and cable-based services. To the extent that the Act fails to account for present technical and market

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^{1.} Communications Act of 1934, Pub. L. No. 73-416, 48 Stat. 1064 (codified as amended at 47 U.S.C. §§ 151-614 (2001), and in scattered sections of 47 U.S.C.).

realities, notably including the rapid growth of the Internet, there may be the risk of irrational results, regulatory arbitrage, or distortions in the development of technology or coverage. Convergence is by no means confined to the United States. It is a global phenomenon. Responses, however, have varied from region to region.

The European Union's telecommunications regulatory framework adopted in March 2002 represents a bold and innovative response to the challenges of convergence.² It recognizes that much of telecommunications regulation exists as a means of addressing potential and actual abuses of market power. With that in mind, the EU attempts a comprehensive, technology-neutral approach to regulation, which borrows concepts of market definition and of market power from competition law.

This paper assesses potential strengths and weaknesses of the EU approach, and considers its possible relevance to the very different legal and regulatory framework in the United States. The paper addresses the following questions, among others. First, why is it that the two systems appear to frequently generate similar results? When might the two systems generate different results, and why? Perhaps most intriguing of all: *Why* do we regulate the things that we regulate? What light does the new EU regulatory framework shed on this question?

In this paper, we consider first the U.S. telecommunications regulatory system, and then that of the European Union. We consider each system in terms of its regulatory framework, its competition law framework, the ability of regulators to obtain the information they need and to protect sensitive third party data, the support for deregulation, and the balance struck between centralization and decentralization. We then evaluate specific outcomes of the U.S. regulatory system, and then pose the question in each case as to whether the new EU system could potentially generate similar outcomes. We proceed to review briefly certain implementation challenges to the new EU system, and close by considering the potential relevance of the new European framework to regulatory practice in the United States.

^{2.} Indeed, the framework is in large part a response to convergence challenges raised in the "Green Paper" of 1997. European Commission: Information Society, *Results of the Public Consultation on the Green Paper on the Convergence of the Telecommunications, Media and Information Technology Sectors* (1999), *at* http://europa.eu.int/ISPO/convergencegp/ ip164en.html.

Regulation needs to be transparent, clear and proportional and distinguish between transport (transmission of signals) and content. This implies a more horizontal approach to regulation with a homogenous treatment of all transport network infrastructure and associated services, irrespective of the nature of the services carried.

I. CONVERGENCE AND THE US LEGAL AND REGULATORY FRAMEWORK

As previously noted, convergence has been widely recognized as representing a regulatory challenge. Particularly vexing issues relate to the regulatory treatment of broadband services over cable and wireline media, and potentially of IP telephony. For example, a recent report from the National Academy of Sciences noted:

The Telecommunications Act of 1996, which for the most part assumes the continued existence of a number of distinct services that run over distinct communications technologies and separate infrastructure, does not fully reflect the convergent nature of broadband (different communications infrastructures are able to deliver a similar set of services using a common platform, the Internet)....³

In this section, we consider the legal framework for telecommunications regulation in the United States.⁴ We then proceed to consider merger and competition law in the U.S., in order to gain a comparative sense of how it relates to equivalent practice in Europe.

A. Legal Framework of Telecommunications Regulation

Telecommunications in the U.S. is primarily governed by the Communications Act of 1934,⁵ which was substantially amended, most notably by the Telecommunications Act of 1996.⁶

Within the Act, Title I establishes the structure and jurisdiction of the FCC, and also provides definitions used throughout the Act. Title II addresses the regulation of Common Carriers, which represent the traditional world of telephony. Title III concerns wireless services and broadcast Radio and television, while Title VI addresses the regulation of Cable Communications.

^{3.} NATIONAL RESEARCH COUNSEL, BROADBAND: BRINGING HOME THE BITS 32 (2002).

^{4.} In this section, we deal with telecommunications regulation in its present form. For a treatment of the history of telecommunications regulation in this country, as it relates to competition and deregulation, see Donald K. Stockdale, *The Regulation, Deregulation and Non-Regulation of Telecommunications and the Internet in the United States* (2001) (unpublished manuscript, on file with the author) (portions of what follows appeared in that paper in a different form).

^{5. 47} U.S.C. §§ 151-614.

^{6.} Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified in scattered sections of 15, 18 and 47 U.S.C.).

Title II contains a wide range of obligations applicable to telecommunications common carriers. These provisions govern, for instance, the prices they may charge for services⁷, obligations to publish those prices in tariffs⁸, limitations on their ability to discriminate⁹, and obligations to interconnect with other carriers and to provide collocation and Unbundled Network Elements.¹⁰ Notably, there is a prohibition against Bell Operating Companies (BOCs) offering interLATA (long distance) services within their historic service areas until they have demonstrated that they have sufficiently opened their local markets to telecommunications competition within the state in question.¹¹

These obligations are not applicable to wireless broadcasters or cable operators (except to the extent that they offer telecommunications services over their facilities). Broadcasters and cable operators are, however, subject to a different set of rules, many of which relate to the content that they carry, or to the spectrum over which wireless services operate.¹²

Under the Act, organizations that provide telecommunications services are held to be common carriers and thus subject to Title II regulation. *Telecommunications service* is defined as "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used."¹³ *Telecommunications*, in turn, is defined as "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received."¹⁴ The definitional category turns on the *nature of the service that is offered*, not necessarily on the technology over which it is offered.¹⁵

15. See also Fed.-State Joint Bd. on Universal Serv., Report to Congress, 13 F.C.C.R. 11,501, 11,559 (1998) [hereinafter Stevens Report].

^{7.} Id. at § 201.

^{8.} Id. at § 203.

^{9.} Id. at § 202.

^{10.} Id. at § 251.

^{11.} Id. at § 271.

^{12.} Id. at §§ 301-96, 601-53 (2003) (In particular, the § 612 "must carry" rules for cable bear notice. Sherille Ismail suggests that differences in "must carry" regulatory treatment of cable compared to that of broadcast or DBS satellite may result, at least in part, from differences among these three in their degree of monopsony market power in the programming market. Sherille Ismail, Achieving Regulatory Parity in Communications Policy (forthcoming) (manuscript on file with author).

^{13. 47} U.S.C. § 153.

^{14.} Id.

This functional approach is consistent with Congress's direction that the classification of a provider should not depend on the type of facilities used. A telecommunications service is a telecommunications service regardless of whether it is provided using wireline, wireless, cable, satellite, or some other infrastructure. Its

1. The Computer Inquiries

The *Computer Inquiries* were a series of FCC regulatory proceedings that addressed the perceived convergence between telecommunications and computing.¹⁶ The Computer Inquiries strongly influenced the Telecommunications Act of 1996; at the same time, certain of the orders remain in effect today.

In Computer I, the Commission made two decisions that laid the foundation for its regulatory approach to services provided by computer data processing service providers. First, the Commission concluded that the public interest would not be served by regulating such data processing services, since the provision of such services was deemed to be "essentially competitive."¹⁷ Second, while the Commission determined that the participation of common carriers in the data processing market would benefit consumers, it expressed concern that common carriers might engage in unfair competition. The dangers of unfair competition, the Commission explained, relate "primarily to the alleged ability of common carriers to favor their own data processing activities by discriminatory services, cross-subsidization, improper pricing of common carrier services, and related anticompetitive practices and activities."18 Accordingly, the Commission concluded that there was a need for competitive safeguards, and it required common carriers seeking to offer data services to do so through a structurally separate affiliate.¹⁹ These safeguards were intended to ensure that carriers would not "give any preferential treatment to their data processing affiliates" and that competing data service providers would therefore have nondiscriminatory access to the underlying communications components used in providing their services.²⁰

classification depends rather on the nature of the service being offered to customers....

Id.

^{16.} See Regulatory and Policy Problems Presented by the Interdependence of Computer and Comm. Servs. and Facils., Notice of Inquiry, 7 F.C.C.2d 11 (1966) [hereinafter Computer I]. See generally PETER W. HUBER, MICHAEL K. KELLOGG, & JOHN THORNE, FEDERAL TELECOMMUNICATIONS LAW 1086-03 (2d ed. 1999).

^{17.} The Commission specifically found "that there is ample evidence that data processing services of all kinds are becoming available... and that there are no natural or economic barriers to free entry into the market for these services." *Computer I, Tentative Decision*, 28 F.C.C.2d 291, ¶. 20 (1970).

^{18.} Computer I, Final Decision and Order, 28 F.C.C.2d 267, ¶ 12 (1971).

^{19.} See id. at ¶ 12 et seq.

^{20.} Id. at ¶ 21.

[Vol. 2

The Commission continued its examination of these issues in the *Computer II* proceeding, which it initiated in 1976.²¹ In *Computer II*, the Commission reaffirmed its basic regulatory approach to the provision of computer data services, but refined its analysis. In particular, the Commission, attempting to define and distinguish regulated telecommunications services and unregulated data services, created the categories of *basic* services and *enhanced* services.²² The Commission also specified in greater detail the extent of structural separation required between the incumbent telephone provider and its enhanced services affiliate.²³

In 1986, the Commission further extended this line of reasoning with its *Computer III* decision.²⁴ *Computer III* offered an alternative set of competitive safeguards to protect competitive providers of enhanced services. Specifically, the Commission gave AT&T and the BOCs that sought to provide enhanced services the option of continuing to comply with *Computer II's* strict separate subsidiary requirements, or alternatively of complying with new "nonstructural safeguards."

Finally, in order to prevent any improper shifting of costs from unregulated to regulated activities, the Commission, in its *Joint Cost* proceeding,²⁵ adopted new, and more detailed, accounting rules that applied to all incumbent local exchange carriers and to dominant interexchange carriers.²⁶

Thus, in the Computer Inquiries, the Commission reaffirmed its commitment to its essential policy of regulating only the common carrier

^{21.} See Amendment of Section 64.702 of the Comm'ns Rules and Regs., Notice of Inquiry and Proposed Rulemaking, 61 F.C.C.2d 103 (1976) [hereinafter Computer II].

^{22.} The Commission defined the term "basic" service, which referred to traditional common carrier telecommunications offerings, as "the offering of transmission capacity for the movement of information." *Computer II, Final Decision*, 77 F.C.C.2d 384, ¶ 93 (1980). The Commission defined "enhanced services" as:

[[]S]ervices, offered over common carrier transmission facilities used in interstate communications, which employ computer processing applications that act on the format, content, code, protocol, or similar aspects of the subscriber's transmitted information; provide the subscriber additional, different or restructured information; or involve subscriber interaction with stored information.

⁴⁶ C.F.R. § 64.702(a).

^{23.} See Computer II, Final Decision, 77 F.C.C.2d 384, ¶¶ 190-266.

^{24.} See Amendment of Section 64.702 of the Comm'ns Rules and Regs., Report and Order, 104 F.C.C.2d 958 (1986), vacated, California v. FCC, 905 F.2d 1217 (9th Cir. 1990) [hereinafter Computer III].

^{25.} See Separation of Costs of Regulated Tel. Serv. from Costs of Non-Regulated Activities, *Report and Order*, 2 F.C.C.R. 1298 (1987) [hereinafter *Joint Cost*]; *Joint Cost*, Order on Reconsideration, 2 F.C.C.R. 6283 (1984); Joint Cost, Order on Further Reconsideration, 3 F.C.C.R. 6701 (1988).

^{26.} In *Computer III*, the Commission also imposed new rules governing disclosure of network changes and the handling of customer proprietary network information. *See Computer III*, *Report and Order*, 104 F.C.C.2d 958, ¶¶ 241-65.

basic transmission service, while exempting *enhanced* services (which represented a blending of computation and communications) from common carrier regulation. Enhanced services did not themselves *provide* bottleneck facilities, but they *depended* on bottleneck facilities controlled by the traditional carriers. The FCC therefore concluded that enhanced services *per se* did not need to be regulated as basic (telecommunications) services. The equipment necessary to implement enhanced services was available on the open market. Barriers to entry were potentially low. The FCC wisely chose to let market forces drive the evolution of enhanced services, without regulatory interference.

At the same time, the Commission continued to emphasize the need for competitive safeguards to ensure that common carriers did not use their bottleneck facilities to compete unfairly against unaffiliated enhanced service providers.

The Telecommunications Act of 1996 formalized and codified the distinction between basic services (renamed *telecommunication services*) and enhanced services (renamed *information services*). The Act defines an information service as "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service."²⁷

2. The Regulatory Framework and the Internet

The *Computer I, II* and *III* rulings and their embodiment in the Telecommunications Act of 1996 represent the underpinnings of U.S. deregulatory policy toward the Internet. On the one hand, they led to the view that the Internet should be viewed as an enhanced service, and that the Internet consequently should not itself be subject to significant regulation. On the other hand, they sought to ensure that the traditional carriers would not be permitted to withhold or to discriminate in the provision of the building blocks essential to the creation of the Internet.

In 1998, the FCC prepared a report to Congress on the likely impact of the Internet, and of Internet telephony, on contributions to the Universal Service Fund (USF).²⁸ The USF is a mechanism whereby the price of telecommunications service in areas of low teledensity (*e.g.* rural areas) is subsidized in order to ensure that it is affordable to all. A number of senators, notably including Senator Stevens of Alaska, were concerned that unregulated Internet services, which were not obliged to

^{27. 47} U.S.C. § 153(20) (2000).

^{28.} See Stevens Report, 13 F.C.C.R. 11,501, 11,516-17 (1998)

contribute to the USF, would ultimately undermine the financial viability of the USF.

The Stevens Report confirmed that Internet access services should continue to be viewed as information services, consistent with longstanding FCC practice. It also analyzed IP telephony at length. In doing so, it established many of the underpinnings of current regulatory practice in the U.S. as regards converged services in general and the Internet in particular.

It is noteworthy that a telecommunications bill enacted a scant six years ago explicitly references the Internet in only two places – in section 230 (the "Communications Decency Act"),²⁹ and in referencing the support of advanced services to schools and libraries in section 254(h) of the Act.³⁰ This dramatically illustrates the pace at which the technology and the marketplace have progressed in the intervening years.

B. Antitrust Analysis in the US

In the U.S., the relationship between telecommunications regulation and antitrust is complex. The FCC, as the independent regulatory body for communications, has statutory responsibility in a number of instances for determining the permissible portion of a national or local market that a single entity may own. It also has responsibility for restricting certain forms of cross ownership (for instance, between broadcast television and newspaper publishing in the same local market).

In the U.S., antitrust concerns sometimes arise as a result of the conduct of a single firm. The American attitude to large corporations has always been somewhat ambivalent – we worry about the power that large corporations wield, and yet at the same time we appreciate the potential benefits associated with the economies of scale and scope that they command. Consequently, it is not held to be a problem for a firm to possess market power; rather, what is problematic is the *abuse* of that market power.

Somewhat different antitrust issues may present themselves when two companies attempt to merge, particularly when the merger would dramatically expand their presence in a relevant market. One of two U.S. agencies will take the lead in investigating any merger – either the Federal Trade Commission (FTC), or the Department of Justice (DoJ).³¹

^{29. 47} U.S.C. § 230 (2003).

^{30.} Id. at § 271. In addition, U.S.C. § 254 refers to "advanced services", while section 706 of the 1996 Act refers to broadband as "advanced telecommunications capability" – arguably, there are many *implicit* references to the Internet. Id. at § 254 (2003) (refers to "advance services").

^{31.} In recent years, for instance, the Department of Justice analyzed the WorldCom/MCI merger and the attempted WorldCom/Sprint merger, while the Federal

In either case, the relevant agency determines whether the merger would constitute a violation of competition law.³² In parallel with this evaluation, the FCC assesses the same merger using a very different standard: Does it serve the public interest?³³

The DoJ/FTC Horizontal Merger Guidelines set forth the methodology that these enforcement agencies will apply in analyzing horizontal mergers (mergers between participants in the same industry).³⁴ The guidelines attempt to provide a rigorous economic methodology for evaluating the prospective impact of a merger.

Under the Guidelines, one begins by defining relevant markets. A relevant product market is defined as "...a product or group of products such that a hypothetical profit maximizing firm that was the only present and future seller of those products likely would impose at least a 'small but significant and nontransitory increase in price'."35 In applying this definition, the antitrust authorities employ a "smallest market principle." That is, they begin by identifying a narrow group of products that includes a product or products of the merging firms. They then consider the effect of a "small but significant and nontransitory" increase in price on a hypothetical monopolist that was the sole supplier of that product or products. If the price increase would result in such a large reduction in demand that the price increase would have been unprofitable, then the next best substitute or substitutes would be added to the relevant product group. The agency applies this procedure iteratively until it has identified the narrowest group of products where the price increase would be profitable. This group of products would then constitute the relevant product market.36

The agency then proceeds to identify participants in the relevant product market,³⁷ and to determine the market shares of the market participants (typically based on dollar sales or shipments). A shorthand tool that is often used to assess the impact of a prospective merger is the *Herfindal-Hirschman Index (HHI).* "The HHI is calculated by summing the squares of the individual market shares of all the

Trade Commission analyzed the AOL/Time Warner merger. Note that the FTC has no jurisdiction over common carriers.

^{32.} The competition law provisions applicable to mergers are contained in Section 1 of the Sherman Act and Section 7 of the Clayton Act. *See* 15 U.S.C. §§ 1, 12 (2003).

^{33.} See 47 U.S.C. §§ 214, 310, 314 (2003).

^{34.} United States Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines*, 57 C.F.R. 41,557 (Apr. 2, 1992) (revised Apr. 8, 1997), *at* http://www.ftc.gov/bc/docs/horizmer.htm.

^{35.} Id. at § 1.1.

^{36.} See id.

^{37.} See id. at § 1.3 (the Guidelines necessarily consider the possibility of supply response).

participants.⁷³⁸ In a perfectly monopolized market, the HHI would be 10,000; in a market with a vast number of tiny competitors, it would approach zero. The HHI is thus a measure of *relative concentration*. In a highly concentrated market (HHI greater than 1,800 after a merger), a merger that results in an increase in the HHI of 100 or more is felt *ceteris paribus* to "potentially raise significant competitive concerns."³⁹

With this information in hand, the agency proceeds to analyze the likely competitive effects of a proposed merger, considering all relevant factors, including the likelihood of subsequent competitive entry, and any beneficial efficiencies that might flow from the merger.

The DoJ or FTC will coordinate with the FCC insofar as possible (see below) during a merger review; however, there is no assurance that FTC/DoJ market definitions and competitive threats will be directly reflected in FCC regulatory policy.

C. Investigative Authority and Access to Information

In assessing a merger, one needs a great deal of information. Typically, much of the relevant information is in the hands of the merging parties, not initially in those of the competition authorities.

The Department of Justice is an investigative agency. When it needs information relevant to a merger, it generally issues a *Civil Investigative Demand* (CID), which has legal force similar to that of a subpoena. Information received pursuant to a CID is maintained in strict confidence, much as would be the case in a criminal prosecution.

The FCC is not an investigative agency, but rather an administrative agency subject to the Administrative Procedure Act (APA).⁴⁰ Nonetheless, it has full statutory authority to use compulsory process to obtain information when necessary.⁴¹ Furthermore, the parties to a merger will tend to be motivated to respond in order to gain permission to consummate the transaction.

In general, external documents received in connection with a "permit and disclose" proceeding must be placed in the public record; however, sensitive documents can be made subject to protective order.⁴² Under the APA, all participating parties are in general entitled to see any

^{38.} Id. at § 1.5.

^{39.} Id. at § 1.51.

^{40. 5} U.S.C. § 551 (2003), et seq.

^{41. 47} U.S.C. § 409(e) (2003) ("the Commission shall have the power to require by subpena [sic] the attendance and testimony of witnesses and the production of all books, papers, schedules of charges, contracts, agreements, and documents relating to any matter under investigation.").

^{42.} A more complex question relates to requests for sensitive information made pursuant to the *Freedom of Information Act (FOIA)* 5 U.SC. § 552 et seq. (2000).

2003]

material submitted by any other party to proceeding; consequently, third parties may be reluctant to provide information, especially where there is threat of retaliation from the merging parties.

D. Deregulation

A number of specific deregulatory initiatives are described later in this paper. The primary statutory *mechanisms* for deregulation are the FCC's *forbearance authority* and the *Biennial Review*.

The Telecommunications Act of 1996 directs the FCC to *forbear* (refrain) from applying any provision of the Act where analysis of the relevant market leads the FCC to conclude that associated charges are neither unreasonable nor discriminatory, and where forbearance does not harm the consumers and is generally in the public interest.⁴³ In doing so, the FCC must specifically consider whether forbearance will promote competitive market conditions.

The FCC is also required to conduct a Biennial Review of all of its regulations issued pursuant to the Act to determine whether any are "no longer necessary in the public interest as the result of meaningful economic competition".⁴⁴ The Biennial Review seeks to ensure that any deregulatory opportunities will be examined not less frequently than at two year intervals.

E. Centralization versus Decentralization

The United States is a federal system. The Federal government has responsibility for interstate communications, while the states have responsibility for activities within their state. In the case of the Internet, the FCC has taken the position that its traffic is interstate, and thus not subject to state or local jurisdiction.

In practice, the relationship is complex. States regulate many aspects of local telephone competition, including local interconnection agreements. Local or municipal governments generally establish franchise arrangements for cable operators. This division of authority is sometimes problematic, but it also is sometimes a source of strength and resiliency for the U.S. regulatory system, enabling support for local preferences, and also providing a more flexible vehicle in some cases for local experimentation with new and innovative regulatory models.

Convergence places special challenges on these complex national/state/municipal interrelationships. First, it impacts the players in somewhat different ways – and their interests are not fully aligned.

^{43. 47} U.S.C. § 160 (2003).

^{44.} Id. at § 161.

Second, it slows the speed with which regulation can respond to changes in the marketplace, because regulation must adapt in different layers.

II. THE NEW EUROPEAN REGULATORY FRAMEWORK

The European Union has been playing a progressively larger role in the regulation of telecommunications. In March 2002, the European Union adopted a new regulatory framework that effectively standardizes the regulatory framework for all EU member states.

An unusual confluence of factors appears to have motivated the EU to take a fresh and daring look at telecommunications regulation. First, EU regulations required a comprehensive regulatory review by the end of 1999. Second, the EU per se was not burdened with as long a history of preexisting regulation as is the United States. Moreover, most EU Member States have migrated only in the last few years from government ownership of telecommunications, primarily on a monopoly basis, to private ownership and competition. They are, in consequence, acutely aware of the benefits of competitive free market mechanisms. They are technologically sophisticated, and recognize the impact of convergence. They also understand that, in the European context, even where there is consensus for change, it can be time-consuming or challenging to translate that consensus into legislation – therefore, when they make a change, it has to last for quite some time. Finally, there are ongoing tensions within the European Union between a strong internal-market role for the European Commission, the executive arm of the E.U., and freedom for Member States to act as they wish. These tensions can be particularly acute when a sector, such as telecommunications, is still in the process of opening to competition for the first time. All of these factors contributed to the willingness of the EU to make so substantial a break with the past.

The Europeans recognized that the bulk of all telecommunications regulation deals, in one way or another, with responses to market power. In particular, they associate the possession of *Significant Market Power* (SMP) with obligations that could include transparency,⁴⁵ non-discrimination,⁴⁶ accounting separation,⁴⁷ access to and use of specific network facilities (including Unbundled Network Elements [UNEs], wholesale obligations, collocation, and interconnection),⁴⁸ price controls

^{45.} Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive), art. 9, 2002 O.J. (L 108) [hereinafter *Access Directive*].

^{46.} Id. at art. 10.

^{47.} *Id.* at art. 11.

^{48.} Id. at art. 12.

and cost accounting, 49 making necessary leased lines available, 50 and carrier selection and pre-selection. 51

The basic concept of the regulation is simple and straightforward. The European Commission will begin by defining a series of relevant telecommunications markets, and by providing a set of guidelines for determining the presence or absence of market power, all based on methodologies borrowed from competition law and economics. Within each market, the National Regulatory Authority (NRA) in each member state will determine whether one or more parties possess SMP. If SMP exists, the NRA will impose appropriate obligations from the set noted in the previous paragraph, taking into account the specifics of the particular marketplace in question.⁵² These obligations are imposed *ex ante*, based on the presence of SMP – it is not necessary to demonstrate that market power has been abused. Conversely, if the NRA fails to find SMP, then any such obligations that may already be in place must be rolled back.

In doing so, the EU seeks to move completely away from technology-specific and service-specific legislation. This is a significant and dramatic innovation.

We now consider each element of the framework in greater detail.

A. Market Definition

In the new framework, it is the European Commission, the executive branch of the European Union, that provides a Recommendation on Relevant Product and Service Markets, "in accordance with the principles of competition law."⁵³ Annex I of the Framework Directive provides an initial list of such markets.

National Regulatory Authorities then take the European Commission's recommendation and define markets within their geographic territories. They are to take "the utmost account" of the recommendation, but the Framework Directive also envisions that NRA definitions might diverge from those of the European Commission in some instances.

^{49.} Id. at art. 13.

^{50.} Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive), art. 18, 2002 O.J. (L 108) [hereinafter *Universal Service Directive*].

^{51.} Id. at art. 19.

^{52.} There is no automatic presumption that any obligation will be appropriate. If a competition authority is about to act, for example, regulatory action may well be inappropriate.

^{53.} Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive), art. 15, 2002 O.J. (L 108) [hereinafter *Framework Directive*].

The European Commission may also adopt a Decision identifying transnational markets, markets that span all or a substantial portion of the EU.⁵⁴ In these markets, additional procedures are required to ensure that NRAs work in concert with one another.

The process for market definition is described in a document referred to as "the Guidelines."⁵⁵ The Guidelines adopt a common framework for NRAs and National Competition Authorities (NCAs), with the recognition that this should ideally lead to equivalent market definitions; however, the Guidelines recognize that the European Commission or national competition authorities may in some instances diverge from market definitions established by European Commission or national regulators for good and valid reasons. They are dealing with somewhat different issues.

European competition law is similar to that of the United States as regards market definition. The economic procedure employed is based on a hypothetical monopolist test, assuming a "small but significant, lasting increase" of 5% to 10% in price of a product or service.⁵⁶ The relevant market then includes all products and services that are readily substitutable for the services in question.⁵⁷

This market definition immediately addresses a number of fundamental convergence issues, and technological neutrality is a direct consequence. As the Guidelines note:

Although the aspect of the end use of a product or service is closely related to its physical characteristics, different kind[s] of products or services may be used for the same end. For instance, consumers may use dissimilar services such as cable and satellite connections for the same purpose, namely to access the Internet. In such a case, both

^{54.} Commission of the European Communities, On relevant Product and Service Markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communication networks and services, *Commission Recommendation* (Feb. 11, 2003).

^{55.} Commission Working Document on Proposed New Regulatory Framework for Electronic Communications Networks and Services, Draft Guidelines on market analysis and the calculation of significant market power, Brussels (Mar., 3, 2001) [hereinafter *Draft Guidelines*].

^{56.} *Id.* at 33.

^{57.} See id. at 35.

According to settled case-law, the relevant product/service market comprises all those products or services that are sufficiently interchangeable or substitutable, not only in terms of their objective characteristics, by virtue of which they are particularly suitable for satisfying the constant needs of consumers, but also in terms of the conditions of competition and/or the structure of supply and demand on the market in question. Products or services which are only to a small, or relative degree interchangeable with each other do not form part of the same market.

services (cable and satellite access services) may be included in the same product market. Conversely, paging services and mobile telephony services, which may appear to be capable of offering the same service, that is, dispatching of two-way short messages, may be found to belong to distinct product markets in view of their different perceptions by consumers as regards their functionality and end use.⁵⁸

B. Significant Market Power (SMP)

Per the Framework Directive, "[a]n undertaking shall be deemed to have significant market power if, either individually or jointly with others, it enjoys a position equivalent to dominance, that is to say a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers."⁵⁹

The Guidelines distinguish between determining market power *ex post* and *ex ante*. In an *ex ante* world, the only meaningful measure of market power is the ability "of the undertaking concerned to raise prices by restricting output without incurring a significant loss of sales or revenues."⁶⁰

As a proxy for market power, the Guidelines suggest computing market shares, typically based on sales volume or sales value. SMP is normally viewed as being a factor only where the market share exceeds 40%. Where the market share exceeds 50%, SMP is assumed to be present.⁶¹

This notion of concentration is roughly equivalent to that of a highly concentrated market, as described in the DoJ/FTC guidelines. A market share of 40-50% would imply an HHI of at least 1,600 to 2,500, assuming that all other market participants were extremely small. Note that an HHI of 1,800 or greater implies a highly concentrated market to the DoJ. Thus, the level of concentration at which the US and EU would consider a market to be problematic are in the same general range.

The Guidelines also deal with market power in upstream or downstream vertically related markets,⁶² and with collective dominance.⁶³

^{58.} Id. at 36.

^{59.} Framework Directive, supra note 53, at art. 14, pt. 2.

^{60.} Draft Guidelines, supra note 55, at 65.

^{61.} See id. at 67.

^{62.} See id. at 74-76.

^{63.} *See id.* at 77-79. The concept of collective dominance has become well established in European case law. By contrast, collective dominance is rarely raised as a concern in the U.S. unless there is actual evidence of collusion.

C. Access Requirements

As previously noted, the EU Framework requires NRAs to impose appropriate remedies *ex ante* from the list of possible options⁶⁴ where one or more firms are found to have SMP, but to eliminate restrictions absent SMP:

Where a national regulatory authority concludes that the market is effectively competitive, it shall not impose or maintain any of the specific regulatory obligations referred to in paragraph 2 of this Article. In cases where sector specific regulatory obligations already exist, it shall withdraw such obligations placed on undertakings in that relevant market. An appropriate period of notice shall be given to parties affected by such a withdrawal of obligations.

Where a national regulatory authority determines that a relevant market is not effectively competitive, it shall identify undertakings with significant market power on that market... and the national regulatory authority shall on such undertakings impose appropriate specific regulatory obligations referred to in paragraph 2 of this Article or maintain or amend such obligations where they already exist.⁶⁵

D. Investigative Authority and Access to Information

When the European Commission assesses a merger, it has full authority to issue information requests with subpoena-like legal force, and it also has the obligation to protect confidential information that it receives pursuant to those requests. In these regards, its authority is similar to that of the U.S. DoJ or FTC.

The new framework recognizes the need for regulators to obtain data on which to base market definitions and determination of SMP. It accords NRAs rights and responsibilities equivalent to those of NCAs:

Member States shall ensure that undertakings providing electronic communications networks and services provide all the information, including financial information, necessary for national regulatory authorities to ensure conformity with the provisions of, or decisions made in accordance with, this Directive and the Specific Directives. These undertakings shall provide such information promptly on request and to the timescales and level of detail required by the national regulatory authority. The information requested by the national regulatory shall be proportionate to the performance of that

^{64.} See Framework Directive, supra note 53, at art. 16, pt. 2.

^{65.} Id. at 3-4.

task. The national regulatory authority shall give the reasons justifying its request for information.⁶⁶

The EU regulatory framework also establishes parameters whereby NRAs can exchange the data that they thus obtain with NCAs, the European Commission, and other NRAs, but only to the extent necessary and proportionate to enable implementation of the Framework.⁶⁷

E. Deregulation

Under the new Framework, regulation and deregulation are handled symmetrically. Where SMP is present, appropriate remedies must be applied. Where SMP is absent, those remedies may not be applied, and if already present must be removed.

No specific timeframe is specified.

F. Centralization versus Decentralization

If the U.S. is a federal system, the E.U. might be said to be more akin to the U.S. under the Articles of Confederation, particularly in regard to areas such as foreign policy, defense and internal security.⁶⁸ The European historical experience has differed from that of the United States, and the European system is in consequence significantly less centralized than that of the U.S. today in many respects.

The tensions of centralization and decentralization that have been fought over in the U.S. for many decades are arguably even more intense in the European context. In most respects, EU member states are sovereign states. They work together in certain ways in order to achieve specific goals, such as uniform competition policy or a single currency.

In establishing a common regulatory framework, it was necessary to delicately balance the prerogatives of NRAs against the needs of the single market, and the prerogatives of the European Commission in maintaining that single market.

The balance that was struck preserves the ability, in general, of NRAs to operate unilaterally, but with notice to the European Commission and to other NRAs. The European Commission retains the ability to require that a market definition or a designation of SMP be withdrawn where it would create a barrier to the single European

⁶⁶*. Id.* at 1.

^{67.} See id. at 2.

^{68.} *Cf.* Guido Tabellini, *The Assignment of Tasks in an Evolving European Union*, CENTRE FOR EUROPEAN POLICY STUDIES POLICY BRIEF NO. 10, 4-6 (Jan. 2002).

marketplace, or would be incompatible with the EU policy objectives embodied in Article 8 of the Framework Directive.⁶⁹

A particularly knotty case relates to transnational markets, markets that span all or a substantial portion of the EU. "In the case of transnational markets ..., the national regulatory authorities concerned shall jointly conduct the market analysis taking the utmost account of the Guidelines and decide on any imposition, maintenance, amendment or withdrawal of regulatory obligations referred to in paragraph 2 of this Article in a concerted fashion."⁷⁰

For there to be tension between centralization and decentralization in the implementation of the new telecommunications regulatory framework in the E.U. is perhaps not surprising – similar tensions have existed in many political systems, and in many eras.⁷¹

G. Benefits

There is much to be said for the new EU framework. It attempts to address convergence by using fluid market definitions instead of enshrining technology-based definitions within the law. It thus offers the potential of regulating at a velocity that approaches that of the changes in underlying technology and marketplace.

The notion of regulating in a completely technology-neutral fashion is promising. If one service is substitutable for another, then it should be subject to roughly the same regulatory constraints, irrespective of the technologies used to deliver the services. This is a very elegant and appealing concept; however, it does not sit well with regulatory practice in the U.S., as we shall see.

At the same time, the proof of this pudding must lie in its eating - and significant questions remain. We take up this topic later in the paper.

^{69.} Framework Directive, supra note 53, at art. 7.

^{70.} Id., at art. 16, ¶ 5.

^{71.} Indeed, this is a classic problem in social sciences. *See* Tabellini, *supra* note 68. Tabellini applies established theory to the EU environment, noting trade-offs between the ability to cope with heterogeneity of local preferences and to exploit local information, versus the impact of "spill-over effects" on specific public goods. *Id* at 5-6. Tabellini also notes the need to avoid "excessive centralisation" and he draws a key distinction between the "bureaucratic accountability" that arguably characterizes Europe today, versus "democratic accountability." *Id.* at 3-4.

III. COMPARATIVE RESULTS

It is impossible to say exactly how the new European framework will be applied in practice, either by the European Commission or by the NRAs. It is nonetheless an interesting thought exercise to consider how it *might* be applied, and to compare the results to those of U.S. regulatory practice in a number of specific instances.

It is perhaps not meaningful to ask, "What would the Europeans do?" More meaningful is to ask, "Is this a plausible outcome in the context of the European framework?"

The examples that follow are drawn from well-established precedent, particularly in the area of traditional telecommunications services. We necessarily refrain from commenting on matters currently before the Commission.

A. Computer Inquiries

We noted earlier that, in the Computer Inquiries, the FCC ruled that enhanced services should not be regulated because they implicated no bottleneck facilities, and did not entail a significant risk of monopolization. This notion was carried forward in the Telecommunications Act of 1996, with its introduction of the concept of information services, and represents a key foundation block for deregulatory U.S. policies toward the Internet.

This result would appear to be entirely consistent with the EU regulatory framework. In the absence of SMP, none of the remedies for SMP should be applied.

B. Competitive Carrier Proceeding

In 1979, the FCC initiated the *Competitive Carrier* proceeding⁷² to consider how its regulations should be modified for new firms entering

^{72.} Policy & Rules Concerning Rates for Competitive Common Carrier Servs. & Facilities Authorizations Therefor, *Notice of Inquiry and Proposed Rulemaking*, 77 F.C.C.2d 308 (1979); Policy & Rules Concerning Rates for Competitive Common Carrier Servs. & Facilities Authorizations Therefor, *First Report and Order*, 85 F.C.C.2d 1 (1980) [hereinafter *Competitive Carrier First Report and Order*]; Policy & Rules Concerning Rates for Competitive Common Carrier Servs. & Facilities Authorizations Therefor, *Further Notice of Proposed Rulemaking*, 84 F.C.C. 2d 445 (1981) [hereinafter *Competitive Carrier Further Notice of Proposed Rulemaking*]; Policy & Rules Concerning Rates for Competitive Common Carrier Servs. & Facilities Authorizations Therefor, *Second Further Notice of Proposed Rulemaking*, 47 Fed. Reg. 17,308 (1982); Policy & Rules Concerning Rates for Competitive Common Carrier Servs. & Facilities Authorizations Therefor, *Second Report Notice of Proposed Rulemaking*, 47 Fed. Reg. 17,308 (1982); Policy & Rules Concerning Rates for Competitive Common Carrier Servs. & Facilities Authorizations Therefor, *Second Report Notice of Proposed Rulemaking*, 47 Fed. Reg. 17,308 (1982); Policy & Rules Concerning Rates for Competitive Common Carrier Servs. & Facilities Authorizations Therefor, *Second Report Notice of Proposed Rulemaking*, 47 Fed. Reg. 17,308 (1982); Policy & Rules Concerning Rates for Competitive Common Carrier Servs. & Facilities Authorizations Therefor, *Second Report Notice of Proposed Rulemaking*, 47 Fed. Reg. 17,308 (1982); Policy & Rules Concerning Rates for Competitive Common Carrier Servs. & Facilities Authorizations Therefor, *Second Report Notice of Proposed Rulemaking*, 47 Fed. Reg. 17,308 (1982); Policy & Rules Concerning Rates for Competitive Common Carrier Servs. & Facilities Authorizations Therefor, *Second Report Carrier Second Report*, *Second Report Report Report Report Carrier Second Report*, *Second Report Carrier Second Report*, *Second Report*, *Second Report*, *Second Report Report*,

formerly monopoly markets. In a series of orders, the Commission distinguished two kinds of carriers – those with individual market power (dominant carriers) and those without market power (non-dominant carriers).⁷³ The Commission found AT&T's Long Lines Department, which provided interstate long-distance services, to be dominant in the interstate, long-distance market (including the long-distance private line market). It also found AT&T's 23 local telephone companies as well as independent, incumbent local telephone companies to be dominant, because they "possess control of essential facilities."⁷⁴ The Commission further found that specialized common carriers and resale carriers, both of which provided interstate, long-distance services in competition with AT&T, to be non-dominant.

The Commission determined that non-dominant carriers were unable to charge unreasonable rates or to engage in discriminatory practices that would contravene the requirements of the Communications Act, both because they lacked market power and because affected customers always had the option of taking service from an incumbent dominant carrier whose rates, terms, and conditions for interstate services remained subject to close scrutiny by the Commission.⁷⁵ Accordingly, the Commission gradually relaxed its regulations of non-dominant carriers. Specifically, the Commission

and Order, 91 F.C.C. 2d 59 (1982) [hereinafter Competitive Carrier Second Report and Order]; Policy & Rules Concerning Rates for Competitive Common Carrier Servs. & Facilities Authorizations Therefor, Order on Reconsideration, 93 F.C.C. 2d 54 (1983); Policy & Rules Concerning Rates for Competitive Common Carrier Servs. & Facilities Authorizations Therefor, Third Report and Order, 48 Fed. Reg. 46,791 (1983) [hereinafter Competitive Carrier Third Report and Order]; Policy & Rules Concerning Rates for Competitive Common Carrier Servs. & Facilities Authorizations Therefor, Fourth Report and Order, 95 FCC 2d 554 (1983) [hereinafter Competitive Carrier Fourth Report and Order], vacated by ATT v. FCC, 978 F.2d 727 (D.C. Cir. 1992), cert. denied, MCI Telecomm. Corp. v. AT&T, 113 S.Ct. 3020 (1993); Policy & Rules Concerning Rates for Competitive Common Carrier Servs. & Facilities Authorizations Therefor, Fifth Report and Order, 98 F.C.C. 2d 1191 (1984) [hereinafter Competitive Carrier Fifth Report and Order]; Policy & Rules Concerning Rates for Competitive Common Carrier Servs. & Facilities Authorizations Therefor, Sixth Report and Order, 99 F.C.C. 2d 1020 (1985) [hereinafter Competitive Carrier Sixth Report and Order], vacated by MCI Telecomm. Corp. v. FCC, 765 F.2d 1186 (D.C. Cir. 1985) [hereinafter Competitive Carrier Proceeding].

^{73.} See Competitive Carrier Fourth Report and Order, supra note 72, at 558, ¶ 7 (The Commission defined market power as "the ability to raise prices by restricting output" and as "the ability to raise and maintain price above the competitive level without driving away so many customers as to make the increase unprofitable.").

^{74.} Competitive Carrier First Report and Order, supra note 72, at 22-24. The Commission specifically noted that it would "treat control of bottleneck facilities as prima facie evidence of market power requiring detailed regulatory scrutiny." *Id.* at 21. The Commission also found Western Union, domestic satellite carriers, and miscellaneous common carriers that relay video signals to be dominant in various relevant markets. *Id.* at 24-28. It acknowledged, however, that market developments were likely to erode the market power of these carriers over time. *Id.*

^{75.} Id. at 31.

eliminated rate regulation for non-dominant carriers and presumed that tariffs filed by non-dominant carriers were reasonable and lawful. It also streamlined tariff filing requirements, which, *inter alia*, had required dominant carriers to file tariffs with notice periods of up to 120 days, and to submit cost support with their tariffs. For non-dominant carriers, in contrast, the Commission required only that tariffs be filed on 14 days notice and did not require any cost support. Finally, the Commission reduced existing Section 214 requirements, which required dominant carriers to file a request for authorization before constructing new lines; under the Commission's streamlined rules, non-dominant carriers only had to file a simple, semi-annual report on circuit additions, but did not have to obtain prior authorization.⁷⁶

Again, these regulatory outcomes would appear to be entirely consistent with European thinking. Retail tariff regulations flow from the possession of SMP (which is roughly equivalent to U.S. concepts of market dominance); in the absence of SMP, there should be neither rate regulation nor the obligation to publish retail tariffs.⁷⁷

C. Streamlining the Regulation of AT&T

As competition developed in the interstate, long-distance market, the Commission initiated two proceedings to determine whether it should streamline its regulation of AT&T, the sole dominant longdistance carrier. In 1990, the Commission initiated the *Interstate Interexchange Competition* proceeding to consider streamlining the regulation of certain AT&T services.⁷⁸ After analyzing the level of

^{76.} *Id.* at 39-44. Subsequently, the Commission announced a policy of permissive "forbearance," under which it would forbear from applying the tariff filing requirements of Section 203 and the entry, exit, and construction authorization requirements of Section 214 to non-dominant carriers. *See Competitive Carrier Second Report and Order, supra* note 72, at 73; *Competitive Carrier Fourth Report and Order, supra* note 72, at 557; *Competitive Carrier Fifth Report and Order, supra* note 72, at 1193, 1209. In 1985, the Commission decided to shift from "permissive" to "mandatory" forbearance, thus requiring de-tariffing by all non-dominant carriers. *Competitive Carrier, Sixth Report and Order, supra* note 72, at 1030-32. The Federal Court of Appeals reversed this finding, holding that the Commission lacked statutory authority to prohibit the filing of tariffs, and in a subsequent appeal, the court further found that the Commission lacked the authority to allow permissive de-tariffing. *See* MCI v. FCC, 765 F.2d 1186 (D.C. Cir. 1985); AT&T v. FCC, 1993 WL 260778 (D.C. Cir. 1993), *affd* MCI v. AT&T, 512 U.S. 218 (1994).

^{77.} See Universal Service Directive, supra note 50, at art. 17.

^{78.} See Competition in the Interstate Interexchange Marketplace, Notice of Proposed Rulemaking, 5 F.C.C.R. 2627 (1990); Competition in the Interstate Interexchange Marketplace, Report and Order, 6 F.C.C.R. 5880 (1991) [hereinafter First Interstate Interexchange Competition Order]; Competition in the Interstate Interexchange Marketplace, Memorandum Opinion and Order, 6 F.C.C.R. 7569 (1991); Competition in the Interstate Interexchange Marketplace, Competition in the Interstate Interexchange Marketplace, Memorandum Opinion and Order, 7 F.C.C.R. 2677 (1992); Competition in the Interstate Interexchange Marketplace, Memorandum Opinion and Order, 7 F.C.C.R. 2677 (1992); Competition in the Interstate Interexchange Marketplace, Memorandum Opinion and Order, 7 F.C.C.R. 2677 (1992); Competition in the Interstate Interexchange Marketplace, Memorandum Opinion and Order, 7 F.C.C.R. 2677 (1992); Competition in the Interstate Interexchange Marketplace, Memorandum Opinion and Order, 7 F.C.C.R. 2677 (1992); Competition in the Interstate Interexchange Marketplace, Memorandum Opinion and Order, 7 F.C.C.R. 2677 (1992); Competition in the Interstate Interexchange Marketplace, Memorandum Opinion and Order, 7 F.C.C.R. 2677 (1992); Competition in the Interstate Interexchange Marketplace, Memorandum Opinion and Order

competition for particular classes of long-distance service, the Commission found that certain services provided by AT&T had become "substantially competitive," and accordingly, it streamlined the regulation of those services.⁷⁹ Specifically, for services that it found to be subject to substantial competition, the Commission removed those services from price cap regulation (i.e., eliminated rate regulation), reduced the notice period for tariff filings relating to those services; and eliminated the cost-support requirement for those tariffed services.⁸⁰ In addition, the Commission permitted AT&T and other interstate long-distance carriers to offer services pursuant to individually negotiated contracts (i.e., to offer contract tariffs).⁸¹

Subsequently, AT&T filed a petition to be reclassified as a nondominant carrier in the provision of interstate interexchange services. In 1995, the Commission granted AT&T's motion, based on its finding that "AT&T lacked individual market power in the interstate, domestic, interexchange market."⁸² Thus, the Commission freed AT&T from price cap regulation for all of its domestic, interstate, interexchange services, subjected it to the same streamlined tariffing and Section 214 regulations that applied to its non-dominant competitors, and eliminated certain accounting and reporting requirements applicable only to dominant carriers.⁸³ In 1986, the Commission reclassified AT&T as non-dominant in the market for international services.⁸⁴

Once again, this seems to be altogether consistent with European thinking. Once SMP has been alleviated, competitive safeguards are no longer necessary and should be eliminated.

on Reconsideration, 8 F.C.C.R. 2659 (1993); Competition in the Interstate Interexchange Marketplace, Second Report and Order, 8 F.C.C.R. 3668 (1993) [hereinafter Second Interstate Interexchange Competition Order]; Competition in the Interstate Interexchange Marketplace, Memorandum Opinion and Order, 8 F.C.C.R. 5046 (1993); Competition in the Interstate Interexchange Marketplace, Memorandum Opinion and Order, 10 F.C.C.R. 4562 (1995) [hereinafter Interexchange Competition proceeding].

^{79.} First Interstate Interexchange Competition Order, supra note 78, at 5911, ¶ 188 (The Commission found that services provided to large- and medium-size business customers had become "substantially competitive."); Second Interstate Interexchange Competition Order, supra note 78, at 3668, ¶ 1 (The Commission found that, with the introduction of 800 number portability, the market for 800 services (except for 800 directory assistance where AT&T had a monopoly) had become substantially competitive.).

^{80.} See First Interstate Interexchange Competition Order, supra note 78, at 5894, ¶ 74.

^{81.} Id. at 5897, ¶ 91.

^{82.} See Motion of AT&T Corp. to Be Reclassified as a Non-Dominant Carrier, Order, 11 F.C.C.R. 3271, ¶ 1, 3356, ¶ 164 (1995).

^{83.} Id. at 3281, ¶ 12.

^{84.} See Motion of AT&T to Be Declared Non-Dominant for International Service, Order, 11 F.C.C.R. 17,963 (1996).

D. Obligations for Interconnection, Resale of Retail Services, Unbundled Network Elements (UNEs), and Collocation

Section 251 of the Act provides for a very modest series of obligations for local exchange carriers in general⁸⁵ (including *competitive local exchange carriers [CLECs]*), but an extensive series of additional obligations for incumbent local exchange carriers (ILECs).⁸⁶ Notable among these are obligations to provide:

(2) Interconnection

The duty to provide, for the facilities and equipment of any requesting telecommunications carrier, interconnection with the local exchange carrier's network

(A) for the transmission and routing of telephone exchange service and exchange access;

(B) at any technically feasible point within the carrier's network;

(C) that is at least equal in quality to that provided by the local exchange carrier to itself or to any subsidiary, affiliate, or any other party to which the carrier provides interconnection; and

(D) on rates, terms, and conditions that are just, reasonable, and nondiscriminatory, . . .

(3) Unbundled Access

The duty to provide, to any requesting telecommunications carrier for the provision of a telecommunications service, nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions that are just, reasonable, and nondiscriminatory...

(4) Resale

The duty--

(A) to offer for resale at wholesale rates any telecommunications service that the carrier provides at retail to subscribers who are not telecommunications carriers; . . .

(6) Collocation

The duty to provide, on rates, terms, and conditions that are just, reasonable, and nondiscriminatory, for physical collocation of equipment necessary for interconnection or access to unbundled network elements at the premises of the local exchange carrier⁸⁷

If we assume *arguendo* that ILECs possess SMP, then this regulatory outcome appears to be precisely analogous to that described in

^{85. 47} U.S.C. §§ 251(a), 251(b).

^{86.} Id. at § 251(c).

^{87.} Id.

the Access Directive. Article 12, "Obligations of access to, and use of, specific network facilities," enumerates a number of obligations that NRAs may impose upon undertakings that possess SMP, including obligations:

(a) to give third parties access to specified network elements and/or facilities, including unbundled access to the local loop; . . .

(d) to provide specified services on a wholesale basis for resale by third parties; . . .

(f) to provide co-location or other forms of facility sharing, including duct, building, or mast sharing; . . .

(i) to interconnect networks or network facilities.⁸⁸

A significant difference between the two regulatory systems, however, entails the manner in which such constraints might be lifted if market conditions were to change and if effective competition were to emerge.

Under the European framework, the NRA should in theory automatically lift these obligations if market conditions were to change over time in such a way that the undertaking in question no longer possessed SMP.

The equivalent mechanism in the U.S. would be for the FCC to forbear from imposing portions of section 251(c). As previously noted, the Act provides the FCC with authority to forbear from imposing any regulation or any provision of the Act where the FCC determines that such forbearance is in the public interest, is not necessary to protect consumers, and is not needed to prevent discriminatory, unjust or unreasonable charges or terms and conditions.⁸⁹ In determining to forbear, the Act explicitly asks the Commission to weigh the competitive impact of forbearance.

As it happens, however, the Act specifically prohibits the FCC from forbearing from applying requirements under sections 251(c) or 271 until "those requirements have been fully implemented."⁹⁰ This might in practice be somewhat circuitous, and perhaps less certain in its execution than the European solution, but the net effect could potentially be precisely analogous to that envisioned in the European framework – once SMP has been eliminated, the remedies to SMP must be rolled back.

^{88.} Access Directive, supra note 45, at art. 12.

^{89. 47} U.S.C. § 160.

^{90.} Id. at § 160(d).

2003]

E. Entry of Bell Operating Companies into Long Distance

One of the most significant sections of the Telecommunications Act of 1996 is Section 271. Section 271 prohibits Bell operating companies (BOCs) or their affiliates from offering interLATA (i.e. long distance) services in any in-region state⁹¹ until and unless the BOC in question can demonstrate to the satisfaction of state and federal authorities that it is providing access and interconnection to competitors in that state. Section 271 includes a fourteen point checklist of conditions that the BOC must demonstrably meet in order to be granted authorization to provide interLATA services in that state.

This may not directly fit the European model, but it is consistent in spirit with it. The EU framework does not envision a prohibition on a carrier's ability to provide a vertically integrated service as one of the listed regulatory remedies to SMP; indeed, Member States may only prevent a carrier from providing networks and services for overriding reasons of public policy, public security or public health.⁹² One might view the BOCs as having possessed SMP in 1996 (which is not an unreasonable assumption, considering that they were formed through a consent decree). The notion, then, that a regulatory remedy to SMP should be lifted once effective competition has been established is entirely consistent with the European model.

F. Rates for Cable Service

Video services are subject to different rules, but many of the underlying principles are the same as those for common carriers. As one conspicuous example, "[i]f the Commission finds that a cable system is subject to effective competition, the rates for the provision of cable service by such system shall not be subject to regulation by the Commission or by a State or franchising authority⁹⁹³ This is entirely consistent with the new EC framework, in that regulatory rate setting is inappropriate in the absence of SMP.

^{91.} An in-region state is any of the states allocated to that Bell operating company under the AT&T Consent Decree of August 24, 1982. *Id.* at § 271(i)(1).

^{92.} Access Directive, supra note 45, art. 3, at 1.

^{93. 47} U.S.C. § 543(a)(2).

IV. IMPLEMENTATION CHALLENGES

The new European regulatory framework appears to be both comprehensive and theoretically elegant. Implementation issues might nonetheless significantly impact its practical effectiveness.

Are there aspects of implementation that are particularly worrisome?

A. The Role of the European Commission versus that of the NRAs

As we have seen, the Framework represents delicate compromises between granting new powers to the European Commission and preserving the autonomy of the Member State NRAs. On balance, the new framework increases centralization of the European Union insofar as telecommunications regulation is concerned. One might reasonably expect that the new framework will drive an increase in regulatory consistency across the Member States,⁹⁴ but possibly at some loss in the ability of the system as a whole to reflect diverse local needs or to enable innovative experiments at the Member State level.

This tension between centralization and decentralization would appear to represent a potentially significant "fault line" in the implementation of the new regulatory framework. The ability of European Commission and NRA regulators to apply the system in a sensitive and appropriate manner, and to find workable day-to-day compromises, may play a large role in determining the success of the new framework in practice.

The framework envisions possible differences in judgment among NRAs, and between NRAs and the European Commission, and it includes mechanisms for resolving those differences. It is difficult to predict how well those mechanisms will work in practice. This is an area that bears close watching.

B. Emerging or Nascent Services

The definition of SMP is, by default, based on market share. In many cases, emerging new services represent a challenge to the power of entrenched incumbents, and thus represent an enhancement to competition.

There is, however, a risk in regard to new services. A provider of a new service might initially – thanks, perhaps, to first mover advantages – possess a large market share of a tiny, emerging market. If this were to

^{94.} Indeed, this is an explicit objective for the NRAs. *See Framework Directive, supra* note 53, art. 8, at 3(d).

be interpreted as SMP, there is a risk that the regulatory apparatus of the state would be brought to bear in a way that impedes competitive entry instead of fostering it.

The Guidelines recognize this, and note that emerging markets "[S]hould not be subject to inappropriate ex-ante regulation. This is because premature imposition of ex-ante regulation may unduly influence the competitive conditions taking shape within a new and emerging market. At the same time, foreclosure of such emerging markets by the leading undertaking should be prevented."⁹⁵ In principle, this would appear to represent appropriate guidance. In practice, it may be difficult for NRAs to determine whether the imposition of ex ante regulation is appropriate or not, and it is natural to wonder whether different NRAs will be able to apply this guidance in a consistent way across the EU.

V. RELEVANCE TO THE UNITED STATES

As we have just seen, in a great many cases the new European regulatory framework might well tend to reach conclusions similar to those which we reach in the United States. Given that the methodologies are radically different, why should the results be so similar?

Biologists speak of *convergent evolution*. Two unrelated species may evolve functionally equivalent organs in order to deal with similar environmental stresses. The human eye is not the same as that of a fruit fly, but they perform the same function.⁹⁶

Analogously, the new EU framework and the U.S. regulatory environment tend to address similar issues in similar ways, not necessarily because of equivalent methodologies, but rather because our policy objectives, broadly stated, are similar. We are trying to solve roughly the same problems.

There are, however, important distinctions to be drawn. In the U.S., our laws and regulations contain specific regulatory *outcomes*, while the EU Framework defines a *process* for reaching similar results. If both methodologies potentially lead to roughly equivalent regulatory outcomes, is there reason to prefer one methodology to the other?

The EU framework is extremely logical, and has as we have seen the potential to generate good results. In addition, it has certain advantages in comparison with the U.S. methodology:

• In many instances, the notion of SMP more accurately expresses the need for regulation than does the U.S. equivalent regulatory category.

^{95.} See *Draft Guidelines*, *supra* note 55, at ¶ 32.

^{96.} See generally RICHARD DAWKINS, CLIMBING MOUNT IMPROBABLE 19-22 (1996).

- The notion that certain regulatory impositions should be imposed in the presence of SMP, and lifted in its absence, may express regulatory desiderata and the desired *timing* of regulation and deregulation more clearly and more simply than do equivalent U.S. statutes.
- In leaving the determination of SMP, and of suitable remedies, to regulation rather than to statute, the European system may be able to respond to change more nimbly than that in the United States.
- The European system arguably deals with technology convergence, which blurs regulatory categories, far more effectively than that of the U.S.

Thus, there would seem to be much to recommend the European framework.

Unfortunately, the European approach does not fit neatly into U.S. regulatory practice. It is important to bear in mind that the Europeans were able to initiate this monumental overhaul of their system because they had far less relevant regulatory history to contend with than do we in the U.S. They were thus able, with the benefit of experience, to revisit and rewrite their regulation anew.

Our law and our history do not lend themselves to direct application of the EU framework. The law, as we have seen, is based on regulatory categories that imperfectly correspond to market power. More significantly, the law embodies a complex history that reflects innumerable social compacts. The Communications Act of 1934 was itself an agglomeration of earlier practice. Title III, dealing with radio, was added after the fact. The FCC subsequently established regulations for cable television, which subsequently led to the Cable Television Act of 1992 and then to Title VI of the Act.

In the U.S. system, the balances between regulation and deregulation, and between federal, state and local authority all entailed delicate compromises. The European framework is elegant in its simplicity and directness, but it does not capture those nuances.

There would also be certain practical difficulties in any direct application of the European framework in this country. The EU framework depends, as we have seen, on acquisition of sufficient data to enable NRAs to unambiguously determine relevant markets and the possession of SMP. In the U.S., however, the FCC is the national regulatory authority. The FCC lacks the authority to get the information that it would, and may also lack the ability to protect that information from public disclosure.

Additional challenges exist. Europeans may tend to trust governments more than they trust corporations. In the US, it is largely the reverse. It is not clear that Americans would be willing to give regulators such broad authority.

The EU telecommunications regulatory framework nonetheless provides a convenient and natural way to think about the public policy implications of many of the choices that confront the FCC. As we have seen, the EU framework often provides a very simple and direct way of visualizing regulatory outcomes. It could be a very useful exercise for the FCC to use the European methodology as a means of visualizing and understanding the public policy implications of the most challenging regulatory decisions that we confront.

NETWORK NEUTRALITY, BROADBAND DISCRIMINATION

$TIM WU^*$

INTRODUCTION

Communications regulators over the next decade will spend increasing time on conflicts between the private interests of broadband providers and the public's interest in a competitive innovation environment centered on the Internet. As the policy questions this conflict raises are basic to communications policy, they are likely to reappear in many different forms. So far, the first major appearance has come in the "open access" (or "multiple access") debate, over the desirability of allowing vertical integration between Internet Service Providers and cable operators.¹ Proponents of open access see it as a structural remedy to guard against an erosion of the "neutrality" of the network as between competing content and applications. Critics, meanwhile, have taken open-access regulation as unnecessary and likely to slow the pace of broadband deployment.

This paper takes a more general perspective. The questions raised in discussions of open access and network neutrality are basic to both

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^{1.} See generally Joseph Farrell & Philip J. Weiser, Modularity, Vertical Integration, and Open Access Policies: Towards a Convergence of Antitrust and Regulation in the Internet Age, 17 HARV. J.L. & TECH. (forthcoming 2003), available at http://repositories. cdlib.org/iber/cpc/CPC02-035 (last visited Sept. 24, 2003); Glenn A. Woroch, Open Access Rules and the Broadband Race, 2002 L. REV. MICH. ST. U. DET. C.L. 719 (2002); Glen O. Robinson, On Refusing to Deal with Rivals, 87 CORNELL L. REV. 1177, 1224-27 (2002); 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 (2001); Phil Weiser, Paradigm Changes in Telecommunications Regulation, 71 U. COLO. L. REV. 819 (2000); James B. Speta, Handicapping the Race for the Last Mile? A Critique of Open Access Rules for Broadband Platforms, 17 YALE. J. ON REG. 39, 77-90 (2000).

telecommunications and innovation policy. The promotion of network neutrality is no different than the challenge of promoting fair evolutionary competition in any privately owned environment, whether a telephone network, operating system, or even a retail store. Government regulation in such contexts invariably tries to help ensure that the shortterm interests of the owner do not prevent the best products or applications becoming available to end-users. The same interest animates the promotion of network neutrality: preserving a Darwinian competition among every conceivable use of the Internet so that the only the best survive.

Given the likely recurrence of these kinds of questions, this paper compares three general approaches to the regulation of broadband providers: structural remedies, a non-discrimination regime, and self- or non-regulation. It questions, first, the merits of structural remedies like open access as a means for promoting network innovation in favor of less intrusive models. While structural restrictions like open access may serve other interests, as a remedy to promote the neutrality of the network they are potentially counterproductive. Proponents of open access have generally overlooked the fact that, to the extent an open access rule inhibits vertical relationships, it can help maintain the Internet's greatest deviation from network neutrality. That deviation is favoritism of data applications, as a class, over latency-sensitive applications involving voice or video. There is also reason to believe that open access alone can be an insufficient remedy for many of the likely instances of network discrimination.

The preferable framework for ensuring network neutrality, I argue, forgoes structural remedies for a direct scrutiny of broadband discrimination. The link between anti-discrimination regulations and network innovation are as old as the *Hush-a-Phone²* and *Carterfone³* decisions, which controlled AT&T's efforts to destroy innovative network attachments. The basic principle behind a network anti-discrimination regime is to give *users* the right to use non-harmful network attachments or applications, and give innovators the corresponding freedom to supply them. Such a regime avoids some of the costs of structural regulation by allowing for efficient vertical integration so long as the rights granted to the users of the network are not compromised.

But might network neutrality be accomplished without any regulation at all? Basic economic theory suggests that operators have a long-term interest coincident with the public: both should want a neutral platform that supports the emergence of the very best applications.

^{2.} Hush-A-Phone Corp. v. United States, 238 F.2d 266 (D.C. Cir. 1956).

^{3.} Use of the Carterfone Device in Message Toll Tel. Serv., 31 F.C.C.2d 420 (1968).

However the evidence suggests the operators may have paid less attention to their long-term interests than might be ideal. A 2002 survey of operator practices conducted for this paper suggests a tendency to favor short-term results.⁴ In that year, evidence of a discrimination problem became clear from several sources, including consumer complaints about operators who ban classes of applications or equipment, like servers, Virtual Private Networks, or WiFi devices,⁵ and in filings at the Federal Communications Commission by application developers.⁶ The survey in this paper shows that operators indeed had implemented significant contractual and architectural limits on certain classes of applications. Operators showed an unfortunate tendency to want to ban new or emerging applications or network attachments, like WiFi devices or Virtual Private Networks, perhaps out of suspicion or an (often futile) interest in price-discrimination. On the whole the evidence suggests that the operators were often pursuing legitimate goals, such as price discrimination and bandwidth management. The problem was the use of methods, like bans on certain forms of applications, which are likely to distort the market and the future of application development. In short, the recent historical record gives good reason to question the efficacy of self-regulation in this area.

I don't want to suggest that operators are somehow incapable of understanding their long-term interests. Yet, when we return to the open access debate, one account of the utility of the debate is that it played an important informational role—the debate itself helped cable operators evaluate their long-term self-interests, and many have chosen to allow rival ISPs access to their networks, for a variety of reasons.⁷ Even strong believers in deregulation and the advantages of vertical integration recognize that incumbents may occasionally become set in their ways.⁸ In this respect, one of the functions of raising issues of broadband discrimination is to challenge broadband operators to ask whether applications restrictions are a good long-term policy. Indeed many of the improvements in operator behavior in the year 2003 may be

^{4.} See infra Appendix.

^{5.} Complaints about restrictions on broadband applications like filesharing applications or VPNs are common on discussion forums like DSL Reports. *See, e.g.*, BROADBAND REPORTS, *at* http://www.dslreports.com/forum/remark,3775421;mode=flat;root=sware (July, 2002).

^{6.} See Comments of the High Tech Broadband Coalition, In re: Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities (filed June 18, 2002), *available at* http://www.itic.org/policy/fcc_020618.pdf; *see also* FCC Ex Parte Letter, Aug. 22 2003, *available at* http://faculty.virginia.edu/timwu/wu_lessig_fcc.pdf.

^{7.} For example, AT&T Broadband has recently begun to open parts of its network to ISP competition. *See* Peter J. Howe, *Earthlink Debuts On AT&T Networks Offers High-Speed Internet Service*, BOSTON GLOBE, Oct. 17, 2002, at C4.

^{8.} See, e.g., Farrell & Weiser, supra note 1, at 33-36.

linked to the Federal Communications Commission's increased oversight of this area.

This paper encompasses a mixture of empirical and theoretical sections. The first part of five is an effort to explain the relationship between several related concepts in this area: open access, broadband discrimination, and network neutrality. Network neutrality, as shorthand for a system of belief about innovation policy, is the end, while open access and broadband discrimination are the means. I suggest that open access regulation, as a structural remedy to ensure network neutrality, is not ideally suited to that task. A direct analysis premised on normative principle of network neutrality may provide a better means to discuss the harm in question.

The second part develops the theoretical framework for a broadband discrimination regime. It asks whether we can differentiate between justified and unjustified restrictions on user behavior, with particular reference to the restrictions seen in the survey in the third part. The use of restrictions on classes of application to pursue bandwidth management and price discrimination is troubling when those restrictions might be pursued through less restrictive means. The section also asks whether self-regulation is likely, and concludes that the threat of regulation might serve useful.

The third part is a survey of the degree to which broadband operators restrict certain applications and favor others. The study surveys the nation's 10 largest cable operators and six largest DSL providers. The results are mixed. First, cable operators tend to employ far more contractual restrictions than do DSL operators. The contractual restrictions and network designs tend to favor, as a class, one-to-many applications development. Second, there is a tendency to use restrictions on application classes to pursue goals such as price discrimination and bandwidth management.

The fourth part shows what a workable principle of network neutrality would look like and what it would mean for the conduct of broadband providers. It suggests that operators should have the freedom to "police what they own," or act reasonably to control the local broadband network. On the other hand, it suggests that that the Internet community (and, at some point, regulators) should view with suspicion restrictions premised on inter-network criteria. A sample text of an anti-discrimination law is included to show how such a principle could be implemented. Finally, the fifth and final part of this paper addresses several possible counterarguments to the network neutrality regime discussed in this article.

I. NETWORK NEUTRALITY & OPEN ACCESS

The relationship between concepts like open-access, network neutrality, and broadband discrimination may be unclear to the reader. It is best to understand network neutrality as an end, and open access and broadband discrimination as different means to that end. In this section we will examine both why network neutrality might be an attractive goal, and, how an open-access and broadband discrimination regime differ as means toward that end.

A. The Case for Network Neutrality

So what is attractive about a neutral network—that is, an Internet that does not favor one application (say, the world wide web), over others (say, email)? Who cares if the Internet is better for some things than others?⁹

The argument for network neutrality must be understood as a concrete expression of a system of belief about innovation, one that has gained significant popularity over last two decades. The belief system goes by many names.¹⁰ Here we can refer to it generally as the evolutionary model.¹¹ Speaking very generally, adherents view the innovation process as a survival-of-the-fittest competition among developers of new technologies. They are suspicious of models of development that might vest control in any initial prospect-holder, private or public, who is expected to direct the optimal path of innovation, minimizing the excesses of innovative competition.¹² The suspicion arises from the belief that the most promising path of development is difficult to predict in advance, and the argument that any single prospect holder will suffer from cognitive biases (such as a predisposition to continue with current ways of doing business) that make it unlikely to come to the right decisions, despite best intentions.

^{9.} More general arguments in favor of a network neutrality regime can be found in Lawrence Lessig & Tim Wu, FCC Ex Parte Letter, Aug. 22, 2003, *available at* http://faculty.virginia.edu/timwu/wu_lessig_fcc.pdf.

^{10.} A full treatment of the names given to evolutionary theories of innovation is beyond the scope of this paper. Some adherents would ascribe such theories to economist Joseph Schumpeter, while in recent legal work the argument is stated as an argument over what should be owned and what should be free. *See generally* LAWRENCE LESSIG, THE FUTURE OF IDEAS 3-17 (2001).

^{11.} See, e.g., John Ziman, Evolutionary Models for Technological Change, in TECHNOLOGICAL INNOVATION AS AN EVOLUTIONARY PROCESS 3 (John Ziman ed., 2000); RICHARD NELSON, UNDERSTANDING TECHNICAL CHANGE AS AN EVOLUTIONARY PROCESS (1987).

^{12.} In the legal field, Edmund W. Kitch's *The Nature and Function of the Patent System*, 20 J.L. & ECON. 265 (1977) is often taken to exemplify this approach.

This account is simplistic; of interest is what the theory says for network design. A communications network like the Internet can be seen as a platform for a competition among application developers. Email, the web, and streaming applications are in a battle for the attention and interest of end-users. It is therefore important that the platform be neutral to ensure the competition remains meritocratic.

For these reasons, Internet Darwinians argue that their innovation theory is embodied in the "end-to-end" design argument, which in essence suggests that networks should be neutral as among applications.¹³ As network theorist Jerome Saltzer puts it: "The End-to-End argument says 'don't force any service, feature, or restriction on the customer; his application knows best what features it needs, and whether or not to provide those features itself."¹⁴ The Internet Protocol suite (IP) was designed to follow the end-to-end principle, and is famously indifferent both to the physical communications medium "below" it, and the applications running "above" it.¹⁵ Packets on the Internet run over glass and copper, ATM and Ethernet, carrying .mp3 files, bits of web pages, and snippets of chat. Backers of an evolutionary approach to innovation take the Internet, the fastest growing communications network in history, as evidence of the superiority of a network designed along evolutionary principles.¹⁶

There is much to this debate, and I do not want to suggest that the discussion about the general merits of evolutionary innovation models are settled, nor are the debates over whether a neutral platform best stimulates competition among applications.¹⁷ But sentiments like those I have just expressed have come to enjoy a broad normative following. From this we can understand why preserving a neutral network might be taken as a suitable goal of Internet communications policy.

^{13.} See J.H. Saltzer et al., End-to-End Arguments in System Design, 2 ACM TRANSACTIONS COMPUTER SYS. 277 (1984), available at http://web.mit.edu/Saltzer/www/ publications/endtoend/endtoend.pdf (last visited Oct. 9, 2003).

^{14.} *Id.* at 3.

^{15.} The metaphors of "above" and "below" come from the fact that in a layered model of the Internet's design, the application layers are "above" the TCP/IP layers, while the physical layers are "below." *See* ANDREW S. TANENBAUM, COMPUTER NETWORKS 39 (4th ed. 2002).

^{16.} LESSIG, *supra* note 10, at 14 ("No modern phenomenon better demonstrates the importance of free resources to innovation and creativity than the internet.").

^{17.} For a recent work doubting the merits of open platform designs under some circumstances, *see, e.g.*, Douglas Lichtman, *Property Rights In Emerging Platform Technologies*, 29 J. LEGAL STUD. 615 (2000).

B. The Open Access Remedy and its Limitations

Taking network neutrality as the goal, we can understand open access as one kind of remedy. The term open-access is used in many different ways; it generally refers to a structural requirement that would prevent broadband operators from bundling broadband service with Internet access from in-house Internet service providers.¹⁸ Certain proponents, like Jerome Saltzer, Larry Lessig and Mark Lemley, make the logical link between open-access regulation and the preservation of a neutral Internet. They argue that if cable operators are allowed to bundle ISP services with cable services, cable operators would be in a position to destroy the neutrality of the network by foreclosing competition among Internet applications. As Lemley and Lessig put it,

[T]here is, in principle, no limit to what a cable company could bundle into its control of the network. As ISPs expand beyond the functions they have traditionally performed, AT&T or Time Warner might be in a position to foreclose all competition in an increasing range of services provided over broadband lines. The services available to broadband cable users would then be determined by the captive ISPs owned by each local cable company. This design would contradict the principle that the network should remain neutral and empower users. It further could constitute the first step in a return to the failed architecture of the old AT&T monopoly.¹⁹

Critics of this argument, like Phil Weiser, Jim Speta, and Glen Robinson, have, in the main, cast doubt on the claim that regulation is needed to prevent cable operators from foreclosing competition when it would be efficient, or ask whether network neutrality is an appropriate goal.²⁰ But I want to raise a slightly different question. If we agree with the normative goal of network neutrality, to what degree does the structural remedy of open-access actually serve its interest? Might we do better by targeting network neutrality directly with questions of broadband discrimination?

I believe there are several reasons to question the fit between openaccess remedies and network neutrality. First, the concept of network neutrality is not as simple as some IP partisans have suggested. Neutrality, as a concept, is finicky, and depends entirely on what set of

^{18.} The FCC, for example, has outlined three forms of open access remedy in ongoing open access rulemaking. *See* Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, *Declaratory Ruling and Notice of Proposed Rule Making*, 17 F.C.C.R.. 4798, ¶ 74 (2002) (discussing various models of open access regulation).

^{19.} See Lemley & Lessig, supra note 1, at 942-43.

^{20.} See Speta, supra note 1, at 76; Farrell & Weiser, supra note 1, at 4-6; Robinson, supra note 1, at 1216-17.

subjects you choose to be neutral among.²¹ A policy that appears neutral in a certain time period, like "all men may vote", may lose its neutrality in a later time period, when the range of subjects is enlarged.

This problem afflicts the network neutrality embodied in the IP protocols. As the universe of applications has grown, the original conception of IP neutrality has dated: for IP was only neutral among *data* applications. Internet networks tend to favor, as a class, applications insensitive to latency (delay) or jitter (signal distortion). Consider that it doesn't matter whether an email arrives now or a few milliseconds later. But it certainly matters for applications that want to carry voice or video. In a universe of applications, that includes both latency-sensitive and insensitive applications, it is difficult to regard the IP suite as truly neutral as among all applications.

This point is closely linked to questions of structural separation. The technical reason IP favors data applications is that it lacks any universal mechanism to offer a quality of service (QoS) guarantee.²² It doesn't insist that data arrive at any time or place. Instead, IP generally adopts a "best-effort" approach: it says, deliver the packets as fast as you can, which over a typical end-to-end connection may range from a basic 56K connection at the ends, to the precisely timed gigabits of bandwidth available on backbone SONET links. IP doesn't care: it runs over everything. But as a consequence, it implicitly disfavors applications that do care.

Network design is an exercise in tradeoffs, and IP's designers would point out that the approach of avoiding QoS had important advantages. Primarily, it helped IP be "downwardly" neutral as to the underlying physical media. But this requires us to be more circumspect in our discussions of network neutrality. IP's neutrality is actually a tradeoff between upward (application) and downward (connection) neutrality. If it is upward, or application neutrality that consumers care about, principles of downward neutrality may be a necessary sacrifice.

This returns us to the question of structural separation. We have a public network that is indeed a great creative commons for data applications, but it is less so for any application that requires a minimum quality of service. True application neutrality may, in fact, sometimes require a close vertical relationship between a broadband operator and Internet service provider. The reason is that the operator is ultimately

^{21.} *Cf.* Lamb's Chapel v. Ctr. Moriches Union Free Sch. Dist., 508 U.S. 384, 397-400 (1993) (Scalia, J., concurring) (on the meaning of neutrality in the context of church and state).

^{22.} Efforts to add quality of service functionality to the Internet protocol, such as the IETF's DiffServ and IntServ's approaches, have never been implemented to provide end-toend quality of service on an IP network.

the gatekeeper of quality of service for a given user, because only the broadband operator is in a position to offer service guarantees that extend to the end-user's computer (or network). Delivering the full possible range of applications either requires an impracticable upgrade of the entire network, or some tolerance of close vertical relationships.

This point indicts a strict open-access requirement. To the extent open access regulation prevents broadband operators from architectural cooperation with ISPs for the purpose of providing QoS dependent applications, it could hurt the cause of network neutrality.²³ By threatening the vertical relationship required for certain application types, it could maintain IP's discrimination in favor of data applications. More broadly, this argument shows that the concept of network neutrality cannot be taken as counsel against all vertical integration.²⁴

A second, and simpler, problem with open access from a neutrality perspective is that the structural remedy may also be an underinclusive means of ensuring network neutrality. Competition among ISPs does not necessarily mean that broadband operators will simply retreat to acting as passive carriers in the last mile. As the survey in this study shows, operators continue to have reasons to want to control usage of the Internet based on their status as broadband operators, regardless of ISP competition. Hence, open-access does not end the debate over whether broadband operators are capable of engaging in undesirable behavior from the perspective of the public network.

For these reasons, this paper seeks to see if we might do better to address questions of network neutrality directly, through the remedial concept of "broadband discrimination," rather than through structural solutions like open-access.

II. THE CONCEPT OF BROADBAND DISCRIMINATION

The question of controlling what people do with their network services is hardly new to communications regulation. It is as least as old as *Hush-A-Phone*, and the D.C. Circuit's interpretation of the 1934 Communications Act to find that the subscriber has a "right reasonably to use his telephone in ways which are privately beneficial without being publicly detrimental."²⁵

^{23.} This might happen, for example, if an open-access regulation slowed the development of vertically integrated layer 2 / layer 3 architectures.

^{24.} Ultimately, this line of argument echoes the economists' point that efficiencies exist from vertical integration. The point here is to show that principles of network neutrality lead to the same conclusion.

^{25.} Hush-A-Phone Corp. v. United States, 238 F.2d 266, 269 (D.C. Cir. 1956).

[Vol. 2

Nor is the prevention of discrimination a new topic in communications regulation. Over the history of communications regulation, the Government has employed both common carriage requirements (similar to the neutrality regime discussed here) and limits on vertical integration as means of preventing unwanted discrimination. The goal of this section is to further explain how a common carriage or anti-discrimination model might be better developed to address the current Internet environment.

Why might thinking in discrimination terms be useful? Only because it borrows from what is familiar to achieve new goals. What is critical to the study of discrimination regimes is the existence of both justified and suspect bases of discrimination. For example, in the employment context, where discrimination norms are most developed, employers are generally permitted to fire or refuse to hire individuals for a range of reasons, such as education-level, intelligence, and demeanor.²⁶ The law implicitly recognizes that it is essential that the employer retain the freedom to fire incompetents and hire only those with necessary skills. On the other hand, criteria such as race, sex, or national origin are suspect criteria of discrimination, but can only be justified by a bona fide rationale.²⁷

While discrimination among Internet applications is a different context, the framework of analysis can be usefully retained. As the proposal in Part IV develops, it is possible to distinguish between classes of restrictions that should generally be allowable, and those that might raise suspicion. Overall, there is a need to strike a balance between legitimate interests in discriminating against certain uses, and reasons that are suspect either due to irrationality or because of costs not internalized by the broadband operator.

To get a better feeling for what a discrimination approach entails, it is helpful to map out some of the extremes of clearly permissible and clearly troublesome discrimination in the broadband context. At one extreme, many of the usage or application bans surveyed are clearly justified. For example, operators usually ban users from using applications or conduct that are meant to hurt the network or other users, like network viruses.²⁸ It is true that this is a departure from

^{26.} See, e.g., 42 U.S.C. § 2000e et seq. (2002) (codification of Title VII of the Civil Rights Act of 1964).

^{27.} See id.

^{28.} An example from the Cox Acceptable Use Policy:

You are prohibited from posting, transmitting or disseminating any information or software that contains a virus, Trojan horse, worm or other harmful program or that generates levels of traffic sufficient to impede others' ability to send or retrieve information. Prohibited conduct of this type includes denial of service attacks or

network neutrality, because it disfavors a class of applications—those that are disruptive to the network. Yet, it is clear that the operator has acted to solve a problem of a negative externality—the costs imposed by one user on others. Few could or would argue that this is a bad thing.

At the opposite extreme, the harm from totally unjustified discrimination is equally clear. Leaving aside whether operators would actually act in this way, imagine that the nation's broadband operators came to feel that IP "chat" programs were just a waste of time, and were able to use their control over the last mile to ban their use.²⁹ Such discrimination has both a direct harm as well as several negative externalities. The direct harm is obvious: existing broadband consumers who like chat programs lose the opportunity to use a valued application, while creators of chat programs lose whatever revenue opportunity chat programs create. But the more interesting costs are the various losses of positive externalities. Three stand out. First, if chat programs have positive externalities for other network applications-say, if the chat program is middle-ware for a file-exchange program, as in the case of Aimster-dependent applications are hurt as well. Second, to the degree other applications depend on a critical mass of high-bandwidth users, they are hurt by potential subscribers who at the margin are not willing to pay for broadband without the chat programs. Finally, to the extent chat programs have positive social externalities, like helping people to plan meetings or meet new boyfriends, the public suffers too.³⁰ Thus, there are considerable potential costs from an irrational or unjustified ban on certain application types.

These are the easy cases. We next consider whether reasons like price discrimination and bandwidth management should justify discrimination among applications.

A. Price Discrimination & Restrictions on Commercial Use

As detailed in the survey below, nearly every operator places limits on "commercial" use, sometimes including limits on Virtual Private

similarly disruptive transmissions, as well as transmissions containing other harmful or malicious features.

Cox Communications Policies, *Acceptable Use Policy*, Cox Communications, Inc., *at* http://support.cox.net/custsup/policies/acceptableuse.shtml (revised Feb. 3, 2003).

^{29.} For example, by screening chat program activity by TCP port number. Such a restriction could be avoided, but it suffices for the example.

^{30.} Conversely, as we will see in a second, if chat programs have negative externalities because they actually do waste everyone's time, the operators may have done the world a big favor.

Networks, as well as limits on acting as a server.³¹ Why might an operator put such a restriction on usage? Doing so obviously makes the service less attractive to consumers who might want to act in a commercial way, even in a fairly casual manner.³²

The simple answer is price discrimination. That this is the case is not just intuition, but can be confirmed by company policy. As evidence we can consider Comcast's reply in 2001 to a user who had complained about the ban on VPN usage on Comcast's network:

Thank you for your message.

High traffic telecommuting while utilizing a VPN can adversely affect the condition of the network while disrupting the connection of our regular residential subscribers.

To accommodate the needs of our customers who do choose to operate VPN, Comcast offers the Comcast @Home Professional product. @Home Pro is designed to meet the needs of the ever growing population of small office/home office customers and telecommuters that need to take advantage of protocols such as VPN. This product will cost \$95 per month, and afford you with standards which differ from the standard residential product.

If you're interested in upgrading³³

As the letter shows, Cable and DSL operators typically offer commercial packages at a considerable markup from basic broadband service. For example, phone companies like Verizon or BellSouth offer T-1 lines at prices far higher than basic DSL or cable service.³⁴ The goal is to exact a premium price from the customers who most desire the commercial service. Allowing subscribers to basic service to operate hosting services might erode such profits.

It is true that mainstream antitrust analysis has come to see price discrimination as generally uncontentious, or at least ambiguous.³⁵ As

^{31.} See, e.g., Cable Modem Service Subscription Agreement, Time Warner Cable, at http://help.twcable.com/html/twc_sub_agreement.html (last visited Mar. 12, 2003) [hereinafter Time Warner Usage Agreement].

^{32.} Network design already discourages hosting activity, because most broadband services give asymmetric bandwidth (more downstream than upstream) and a dynamic, as opposed to fixed, IP address. These design features preclude serious commercial website operation, but leave room for casual hosting operations, such as participating in a peer-to-peer network.

^{33.} See Comcast VPN letter, Practically Networked, at http://www.practically networked.com/news/comcast.htm (last visited Mar. 12, 2003).

^{34.} A T-1 line, providing 1.5 mbps of symmetric data, is usually priced at over 1000 per month.

^{35.} See, e.g., RICHARD POSNER, ANTITRUST LAW 203-06 (2d ed. 2001).

between consumers and producers, it hurts some consumers and helps others, while raising the producers' profits. Yet this analysis can, and should, change as in the broadband context, because the practice of price discrimination may have external effects on the process of innovation and competition among applications. That is to say, while price discrimination among applications may not be troubling from a static perspective (as between existing consumers and producers), it may have dynamic consequences, for the competitive development of new applications.

We can see this in the present example of a ban on commercial operations. The goal, as we've seen, is to maintain a customary markup on business services. But the restrictions on the market for what can be termed commercial applications used on home connections come at a cost. The direct effect of a ban on hosting is to make the connection slightly less valuable to the basic consumer, which presumably the operator takes into account in her pricing scheme. But there are other costs that the operator may not internalize. The bans on commercial use or acting as a server constrain the competitive development of applications that might rely on such a function. In the Comcast letter example the problem was VPN applications, which typically can rely on end-users functioning both as clients and servers, and which can be classified as a commercial use.³⁶ And it is also the case that hosting services may have positive social externalities not taken into account by the operator's decision. For example, VPNs may facilitate greater productivity among employees, a benefit that may be lost in their prohibition.

Another major restriction that interests broadband operators is barring users from providing content to the public or running servers. Why do broadband operators act in this way, if, again, it might lower the value of its service to its users? One reason may be the price discrimination rationale discussed above. Yet from the reports of cable operators themselves, a major goal is bandwidth management.³⁷ The restrictions appear to be efforts to manage how users consume bandwidth by discriminating against types of usage. As the survey showed, such restrictions are more common on cable networks, which operate shared connections and tend to lack technological means for restricting individual bandwidth consumption.³⁸ Hence, the restrictions, for

^{36. &}quot;Servents" in Gnutella terminology.

^{37.} See, e.g., JUSTIN PEARSE, UK shrugs off American broadband troubles, ZDNET NEWS.COM, at http://news.zdnet.co.uk/story/0,,t269-s2077792,00.html (Mar. 20, 2000).

^{38.} More recent incarnations of the DOCSIS protocol attempt to add better QoS functionality, but implementation at this date seems to be scarce. *See Cable Modem/DOCSISTM*, CABLELABS, *at* http://www.cablemodem.com/faq (last visited Mar. 13, 2003) [hereinafter *CABLELABS*, *DOCSIS*].

example, on running "game" or "ftp" programs are most likely efforts to eliminate a potential source of bandwidth consumption.

The goal of bandwidth management poses an even more difficult question than does price discrimination. The goal of bandwidth management is, at a general level, aligned with network neutrality. As discussed above, certain classes of applications will never function properly unless bandwidth and quality of service are guaranteed. Hence, the absence of bandwidth management can interfere with application development and competition.

There are good reasons to question whether price-discrimination, without more, should be permissible grounds for allowing discrimination among applications. As we have seen, such usage restrictions may harm consumer welfare without offering a public benefit. This is particularly the case when there are less-restrictive means for engaging in price discrimination. Selling different tiers of service (low, medium, and high bandwidth) does not favor or discriminate against particular application types. In the presence of a means for differentiating among customers in a way that does not distort the process of competitive innovation, we should view discrimination on the basis of application with suspicion.

Similarly, while managing bandwidth is a laudable goal, its achievement through restricting certain application types is an unfortunate solution. The result is obviously a selective disadvantage for certain application markets. The less restrictive means is, as above, the technological management of bandwidth. Application-restrictions should, at best, be a stopgap solution to the problem of competing bandwidth demands.

B. Self-Regulation and the Educational Properties of Regulation

The previous sections show that broadband operators may want to discriminate amongst the uses of its network for various reasons. We have also seen that there are a variety of justifications—some good and some not—for such restrictions. Even if the goal itself is legitimate, the method of achieving that goal may be suspect. The question, then, is whether cable operators will self-regulate and come up with the best policies on their own, or whether regulation may be necessary.

In this section I argue that while cable operators may come to understand that broadband discrimination is not in their best interest, both the threat of, or actual implementation of, anti-discrimination regulation may otherwise serve a useful informational or educational function. Like anti-discrimination legislation in other contexts, it may serve an educational function, forcing operators to ask whether the

restrictions they draft are actually serving their interest in maximizing the value of their services.

As a baseline, the attractiveness of broadband service is a function of the applications it offers the consumer. Hence, any restriction on use will lower the value of the service, and consequently either the price the operator can charge or the number of customers who will sign up (assuming a negative demand curve). To make this clear: if an operator operated a service that screened all uses except web-access alone it might be worth \$30 to the average consumer, while a service that offered access to every kind of Internet application—including, say, the opportunity to get copyrighted music for free—might be worth \$50. The difference in the value to the consumer will affect the price the operator can charge.

This basic point is captured by Joseph Farell and Philip Weiser's argument that a "platform monopolist has a powerful incentive to be a good steward of the applications sector for its platform."³⁹ The point reflects, as the authors stress, classic arguments from antitrust. A monopolist may still want competition in its input markets, to maximize profit in the monopoly market.

But it is easy for a steward to recognize that the platform should support as many applications as possible. The more difficult challenge has always been the dynamic aspect: recognizing that serving a tangible goal—like controlling bandwidth usage—may affect the intangible status of the Internet as an application development platform. Some of the restrictions, such as those on running various types of server, are applications that are now likely to be used by only a small minority of broadband users. Their sacrifice may appear like a good cost-saving measure.

More generally, the idea that discrimination may not always be rational is a well-understood phenomenon. In the employment context, the various discrimination laws have an explicitly educational function. For example, an express purpose of age discrimination legislation is to force employers to reconsider stereotyped perceptions of the competency of the elderly in the workforce.⁴⁰ Broadband operators may simply disfavor certain uses of their network for irrational reasons, such as hypothetic security concerns or exaggerated fears of legal liability. Additionally, a restriction may become obsolete: adopted at a certain time for a certain reason that no long matters. Practical experience suggests that such things happen.

^{39.} Farell & Weiser, *supra* note 1, at 21. This they describe as the "internalization of complementary efficiencies, or ICE."

^{40.} See Gilmer v. Interstate/Johnson Lane Corp., 500 U.S. 20, 27 (1991) ("the ADEA is designed not only to address individual grievances, but also to further important social policies").

For these reasons, anti-discrimination regulation or the threat thereof can also serve a useful educational function. It can force broadband operators to consider whether their restrictions are in their long-term best interests. And in the absence of law it can establish norms around discrimination that may preserve network neutrality over the long term.

The events of the year 2003 provide evidence to support the utility of a regulatory threat in promoting desirable conduct. Both Comcast and Cox Communications openly disavowed their old practices of placing bans on Virtual Private Networks, and filed documents with the FCC to that respect.⁴¹ The cable industry has furthermore begun to publicly insist that it wants to avoid broadband discrimination in the future, stating, for example, that "Cable Believes in Open Connectivity for the Internet."⁴²

There is the possibility that the current regulatory process has forced cable operators to rethink their practices and conclude that discrimination is not in their long term self-interest. The process demonstrates the continuing utility of communications regulators in remaining appraised on potential problems of anti-competitive practices.

III. A SURVEY OF BROADBAND USAGE RESTRICTIONS

Have broadband operators tended to favor certain uses of the Internet? To what extent? The goal of this section is to answer these questions, to the extent possible, for broadband networks during the year 2002.⁴³

The study divides measures of favoritism and discrimination into two categories: contractual and architectural. The study surveyed the network designs (to the extent that the information was available) and usage restrictions in subscriber agreements and incorporated acceptable

^{41.} See Comcast Corp., FCC Ex Parte Letter, May 9, 2002 ("the 'VPN restriction' about which certain parties have complained has been eliminated from and is no longer part of Comcast's subscriber agreements and terms of service for its high-speed Internet customers."); Cox Enterprises Inc., FCC Ex Parte Letter, May 1, 2003 ("Cox hereby informs the Commission that the language of that [VPN] provision has been changed...").

^{42.} NTCA, *Cable Believes in Open Connectivity for the Internet, at* http://www.ncta.com/legislative/legAffairs.cfm?legRegID=20; *see also* NTCA, Ex Parte Letter, Sept. 8, 2003 (arguing that network neutrality legislation is unnecessary because of cable's commitment to non-discrimination.).

^{43.} Unfortunately, nearly any feature of network design or policy can be described as a deviation from a "purely" neutral design. Something as innocuous as the length of the IP packet header could, potentially, help or hurt certain applications. To avoid an exercise in the esoteric, the goal of this section is to study major, intentional deviations from neutrality that clearly favor certain application types over others.

use policies from the 10 largest cable operators (AT&T,⁴⁴ Time Warner, Comcast, Cox Communications, Adelphia, Mediacom, Charter Communications, CableOne, Insight, and Cablevision), and 6 major DSL operators (Verizon, SBC, Qwest, BellSouth, Sprint and WorldCom). A chart containing full results can be found in the appendix.

The survey showed the following general results. On the whole, broadband operators' networks and usage restrictions favored the applications of the late 1990s (primarily the World Wide Web and other client-server applications), and disfavored more recent applications and usage, like home networking, peer-to-peer applications, and home telecommuting.

There are differences between cable and DSL operators. On the contractual side, cable operators tended to impose far more restrictions on usage than do DSL operators. Major differences exist with respect to the extent of restrictions on home networking, operation of servers, commercial use, and overuse of bandwidth.

An illustrative example is the difference in attitudes toward home networking.⁴⁵ At the extremes, then-Cable operator AT&T Broadband defined home networking as "theft of services" and threatened subscribers with civil and criminal penalties. ⁴⁶ In contrast, DSL provider Verizon makes it clear in its service contract that home networking is permissible, as does Sprint.⁴⁷

There existed variation between individual cable operators and DSL operators on some of the restrictions. On the cable side, AT&T Broadband and Comcast (later combined to form the nation's largest cable operator), stood out for having the strictest usage restrictions. AOL Time-Warner, Charter Communications and smaller operators CableOne and Insight Broadband had the least restrictions. Among DSL operators, BellSouth stood out with the most restrictions, similar in extent to a cable operator. Overall, perhaps the most "liberal" broadband provider was DSL provider Sprint. Sprint has very few usage restrictions, tells subscribers in FAQs that they may run home networks,

^{44.} At the time the survey was conducted, AT&T and Comcast were still operating independently.

^{45.} Home networking refers to the practice of sharing a broadband connection amongst all of the computers in a home, as opposed to the single computer attached to the cable modem. This usually requires the purchase of additional equipment, such as a home router.

^{46.} AT&T Broadband Internet Subscriber Agreement, § 6(g), available at http://help.broadband.att.com/listfaqs.jsp?category_id=973&category-id=34 (last revised Dec. 5, 2001).

^{47.} Verizon Online Internet Access, *Terms of Service, available at* http://www.verizon.net/policies/internetaa.asp (2003).

web servers, and promises users that they "will have complete unrestricted access to all content available on the Internet." $^{\prime 48}$

On the architectural side, the outstanding deviation from neutrality in broadband networks today is the asymmetric bandwidth common across networks. Other, future controls may include application specific controls, as the survey of equipment vendors' offerings shows.

A. Contractual Restrictions

We first consider the individual types of restrictions found in usage agreements, focusing attention on restrictions that are likely to influence the development of certain application-types. The following chart shows the 13 main types of restrictions along with the percentage of major cable operators and DSL operators who stated such restrictions:

TABLE 1. MAJOR USAGE RESTRICTIONS

RESTRICTION	CABLE	DSL
Using a Virtual Private Network	10%	0%
Attaching WiFi Equipment	10%	0%
Making the Connection a Network End Point	10%	0%
Using Home Networking	40%	0%
Misusing IP Addresses	60%	0%
Any Commercial or Business Use	100%	33%
Operating a Server or Providing Public Information	100%	33%
Overusing Bandwidth	100%	33%
Reselling Bandwidth or Acting as an ISP	100%	33%
Conducting Spam or Consumer Fraud	100%	100%
Hacking or Causing Security Breaches	100%	100%
Any Unlawful Purpose	100%	100%
Any Offensive or Immoral Purpose	100%	100%

The appendix indicates which operators in the survey implemented the restrictions above. The following pages provide further details on the language of the most controversial restrictions: (1) providing information to the public or operating a server, (2) commercial uses, (3) Home Networking, and (4) WiFi network operation.

^{48.} Sprint FastConnect DSL, *Frequently Asked Questions, available at* http://csb.sprint.com/home/local/dslhelp/faq.html#gen16 (2003).

1. Restrictions on Providing Content

Nearly every cable operator and one third of DSL operators restricted operating a server and/or providing content to the public.⁴⁹ This restriction has the greatest potential significance because it affects the broadest class of applications—those where the end-user shares content, as opposed to simply downloading content. The potential breadth of server restriction can be seen from AT&T Broadband's acceptable use agreement:

[Subscriber may not] run programs, equipment or servers from the Premises which provide network content or any other services to anyone outside of the your home.... Examples of prohibited programs and equipment include, but are not limited to, mail, ftp, http, file sharing, game, newsgroup, proxy, IRC servers, multi-user interactive forums and Wi-Fi devices.⁵⁰

Again, this restriction can be understood as favoring a "one-tomany" or vertical model of application over a "many-to-many" or "horizontal" model. In application design terms, the restriction favors client-server applications over peer-to-peer designs.⁵¹ If taken seriously, the inability to provide content or act as a server would serve to restrict a major class of network applications.

Not all the restrictions are as broad as AT&T Broadband's. More typical is a simple ban on servers, as seen in this example from Cox Systems: "Servers You may not operate, or allow others to operate, servers of any type or any other device, equipment, and/or software providing server-like functionality in connection with the Service, unless expressly authorized by Cox."⁵² Others, like Charter Communications, name banned applications: "Customer will not use, nor allow others to use, Customer's home computer as a web server, FTP server, file server

^{49.} The exception is Time Warner. See infra Appendix.

^{50.} AT&T Broadband Internet Acceptable Use Policy, ¶ xiv, available at http://help.broadband.att.com/faq.jsp?content_id=1107&category_id=34 (revised July 25, 2002).

^{51.} The Internet's most popular application of the early 1990s—the world wide web—followed a client-server design, where a single specialized, centralized server provides services to a large number of clients. However, today an increasing number of applications use fully or partially decentralized designs. Email was always partially decentralized, for example, and the many popular "chat" programs embody a design that technically requires the user to act as a server as well as a client. Similarly, users who want to access a home computer from work (using, for example, rlogin) need to set up the home computer to act as a server. Peer-to-peer application designs also ask home users to act both as a client and server.

^{52.} Cox Systems, Acceptable Use Policy § 6, available at http://www.cox.com/iNetIncludes/policy/acceptable.asp (updated Apr. 28, 2003). See also AT&T Broadband Internet Acceptable Use Policy, supra note 50.

or game server or to run any other server applications."⁵³ The narrowest form of server restriction is seen in the Verizon terms of service agreement: "You may not use the Service to host a dedicated or commercial server."⁵⁴ Finally, contrary to others, DSL provider Sprint suggests that consumers may, in fact, run a web server, based on the following excerpt from Sprint's FAQ site:

Q: Can I run a web server?

A: Yes it is possible to set-up a web server using your Sprint FastConnect DSL service.⁵⁵

2. Bans on Commercial Use

A second restriction with potential implications for application development is a limit on "commercial" or "enterprise" use of residential broadband connections. Every cable operator and most DSL operators surveyed had some ban on using a basic residential broadband connection for commercial use.

The broadest and most controversial of such restrictions barred home users from using "Virtual Private Network" (VPN) services, which are used by telecommuters to connect to their work network through a secure connection. Cox Systems provides an example of a ban on Virtual Private Networks: "You agree not to use the Service for operation as an Internet service provider, or for any other business enterprise, including, without limitation, virtual private network usage, IP address translation, or similar facilities intended to provide additional access."⁵⁶ More typical bans on commercial use came in the following form, as seen in the Time Warner Subscriber Conduct provision in its acceptable use agreement:

The ISP Service as offered and provided under this Agreement is a residential service offered for personal, non-commercial use only. Subscrber will not resell or redistribute (whether for a fee or otherwise) the ISP Service, or any portion thereof, or otherwise charge others to use the ISP Service, or any portion thereof. Subscriber agrees not to use the ISP Service for operation as an internet service provider, for the hosting of websites (other than as expressly permitted as part of the ISP Service) or for any enterprise

^{53.} Charter Communications Pipeline, *Acceptable Use Policy* § 1(A), *available at* http://www.chartercom.com/site/rules.asp#aup (last checked Oct. 8, 2003).

^{54.} Verizon Online Internet Access, *Terms of Service, supra* note 47, at § 2.4(C).

^{55.} Sprint FastConnect DSL, *Questions & Answers, available at* http://csb.sprint.com/ servlet/Faq/faq_category?category=DSLGenQuestions (2003).

^{56.} Cox Systems, Acceptable Use Policy, supra note 52, at § 5.

purpose whether or not the enterprise is directed toward making a profit.⁵⁷

Again, the limitations found in DSL restrictions were far less extensive. For example, the BellSouth subscriber agreement mixed the restrictions on providing content and acting commercially as follows: "Subscribers may not provide public or commercial information over such [residential DSL] connections."⁵⁸

3. Home Networking

When home networking first became widespread in 2002, four of ten of the nation's largest cable operators contractually limited the deployment of home networks.⁵⁹ They did so by stating restrictions on the number of computers that could be attached to a single connection. The strongest example of such a usage restriction in 2002 came from AT&T Broadband:

THEFT OF SERVICE. Customer shall not connect the Service or any AT&T Broadband Equipment to more computers, either on or outside of the Premises, than are reflected in Customer's account with AT&T Broadband. Customer acknowledges that any unauthorized receipt of the Service constitutes theft of service, which is a violation of federal law and can result in both civil and criminal penalties. In addition, if the violations are willful and for commercial advantage or private financial gain, the penalties may be increased.⁶⁰

A milder approach was taken by Aldelphia's online FAQ:

Can I network more than one computer?

Yes. Please check with a reputable computer electronics retailer for home networking solutions that are right for you. Adelphia will support a cable modem that is connected to a hub or router to the gateway or host computer. Adelphia does not install or support the

^{57.} Time Warner, *Cable Modem Service Subscription Agreement* § 5(a), *available at* http://help.twcable.com/html/twc_sub_agreement.html (last visited Oct. 8, 2003).

^{58.} BellSouth Internet Service, *Acceptable Use Policies, available at* http://home.bellsouth.net/csbellsouth/s/editorial.dll?fromspage=cg/legal/legal_homepage.htm &categoryid=&bfromind=354&ceid=376138&cetype=article&render=y5ck= (last visited Oct. 8, 2003).

^{59.} MediaOne, Comcast, AT&T and Adelphia. Due to enforcement difficulties and the ongoing regulatory proceedings at the Federal Communications Commission, most of these restrictions have been rescinded.

^{60.} AT&T Broadband Internet Subscriber Agreement, § 6(g), at http://www.attbi.com/general-info/bb_terms.html (last visited Mar. 13, 2003).

network. Adelphia Power Link may not be connected to a broadcast server of any kind.⁶¹

In contrast, some DSL operators in their agreements explicitly acknowledged that multiple computers could be connected to the DSL connection. As Verizon's agreement stated: "You may connect multiple computers/devices within a single home or office location to your DSL modem and/or router to access the Service, but only through a single DSL account and a single IP address obtained from Verizon Online."⁶² Other DSL providers were vague. For example, in BellSouth's terms of service: "Unless otherwise specified in the BellSouth Internet Service subscriber's pricing plan agreement, sharing of accounts and/or connections on unlimited usage plans with anyone other than immediate family members in the same dwelling is strictly prohibited."⁶³

4. Restrictions on Wireless (WiFi) Networks

In addition to restrictions on home networking, several cable operators signaled a particular interest in controlling the deployment of home wireless networks. This is clearest with AT&T Broadband: They explicitly banned the connection of "Wi-Fi" equipment.⁶⁴ The provider also made it a breach of the subscriber's agreement to maintain a WiFi service that is available to outsiders. "[It is a breach of the agreement to] resell the Service or otherwise make available to anyone outside the Premises the ability to use the Service (i.e. WiFi, or other methods of networking)."⁶⁵

B. Architectural Controls, Present & Future

1. Present

Today, the principal deviation from network neutrality through architecture is, and continues to be, asymmetric bandwidth: that is, the practice of designing networks to provide more "downstream" bandwidth than "upstream." It is difficult to obtain a full set of data on the extent of

^{61.} Adelphia FAQ, Home Networking, at http://www.adelphia.com/high_speed _internet/faqs.cfm (last visited Mar. 13, 2003).

^{62.} Verizon Online's Terms of Service, § 2.5B, at http://www.verizon.net/policies/internetaa.asp.

^{63.} See BellSouth, Acceptable Use Policies, supra note 58.

^{64.} AT&T Broadband Internet Acceptable Use Agreement, supra note 50, at ¶ 14 ("Examples of prohibited . . . equipment include . . . Wi-Fi.").

^{65.} *Id.* at ¶ ix. Cox Systems, *Acceptable Use Policy, supra* note 52, at 17, has a similar restriction.

asymmetry, because many cable operators do not make public the maximum bandwidth permitted by their networks. However, from the few sources of data that are available, we find that there is greater asymmetry in cable networks than DSL—though the shared architecture of cable networks makes the significance of this fact unclear. Published DSL rates included residential bandwidth with as low as 1:1 ratios, while the modal ratio is 6:1 ratios.⁶⁶ The few cable networks with public data promised maximum bandwidth ratios ranging from 5.3:1 (Time Warner / Earthlink) to as much as 12:1 (Cox Communications).⁶⁷

As others have recognized, allowing more downstream than upstream bandwidth obviously favors the development of applications that are one-to-many, or client-server in design. Applications that would demand residential accounts to deliver content as quickly as they receive it will do less well under conditions of asymmetric bandwidth.

2. Future – Better Bandwidth Management or Application Layer Controls?

It is difficult to predict what application controls broadband operators might implement in the future. Yet future possibilities can be gleaned from the marketing efforts of equipment vendors who target the cable and DSL market. Two trends can be briefly noted, though the full topic is well beyond the scope of this paper.

First, over the last several years, several companies have begun to market equipment described to facilitate application-based screening and control for broadband networks. Two prominent examples are Allot Communications and Packeteer Communications. The former markets a product named "NetEnforcer" to cable and DSL operators,⁶⁸ promising to control problems from both peer-to-peer traffic and unauthorized WiFi connections.⁶⁹ Allot's competitor, Packeteer, markets a similar product, named "PacketShaper," described as "an application intelligent traffic management appliance providing visibility into and control over network utilization and application performance."⁷⁰ The company claims that the product is used on hundreds of University campuses, primarily to

^{66.} See infra Appendix.

^{67.} Id.

^{68.} Allot Communications Netenforcer[®] Data Sheet, *at* http://www.allot.com/html/products_netenforcer_sp.shtml (last visited Mar. 13, 2003).

^{69.} Jim Barthold, *Allot looks to help servers with bandwidth congestion problems*, TELEPHONY.ONLINE.COM, *available at* http://telephonyonline.com/ar/telecom_allot_looks _help/index.htm (Dec. 3, 2002).

^{70.} Packeteer, *at* http://www.packeteer.com/products/packetshaper.com (last visited Mar. 13, 2003).

control peer-to-peer traffic.⁷¹ When this survey was conducted, despite the marketing efforts of both companies, there was no evidence of deployment by cable or DSL operators. It is therefore impossible to conclude whether broadband operators will begin using technological means to facilitate restrictions on usage.

Second, vendors of cable data equipment promise improved bandwidth management capabilities as between individual customers on cable networks.⁷² This is the promise of the DOCSIS⁷³ 1.1 and 2.0 standards, which are an update to the current DOCSIS 1.0 standard in use today.⁷⁴ As the new equipment is not yet widely deployed, these claims or their impact cannot be verified.

C. Conclusions & Evidence of Enforcement

What, generally, can be concluded from this survey? On the one hand, there is no broad effort to ban everything that might be said to threaten the interests of cable and DSL operators. For example, cable operators have not now barred streaming video, despite the potential to compete with cable television, and despite Dan Somers' famous comment that "AT&T didn't spend \$56 billion to get into the cable business to have the blood sucked out of [its] veins."⁷⁵ This conclusion is reinforced by the general perception that broadband access is not substantially limited.

To what degree are these usage restrictions enforced? While there is little formal data on enforcement patterns, there exists anecdotal evidence of enforcement on websites like DSL Reports,⁷⁶ which are dedicated to users complaining about broadband service and usage restrictions. Some examples of enforcement include the enforcement of monthly or daily bandwidth limits through a threatening to terminate or restrict the accounts of users who use too much bandwidth in a single month. For example, Cox Cable in November 2002 sent letters to users

^{71.} Gwendolyn Mariano, *Schools declare file-swapping truce*, CNET NEWS.COM, *at* http://news.com.com/2100-1023-859705.html?tag=rn (Mar. 14, 2002).

^{72.} See, e.g., http://www.cisco.com/warp/public/779/servpro/solutions/cable (last visited Mar. 13, 2003).

^{73.} DOCSIS stands for Data Over Cable Service Interface Specifications. *See Seven Cable Modem Manufacturers Seek DOCSIS Certification*, CABLELABS, *at* http://www.cablelabs.com/news/newsletter/SPECS/specnewsaug/news/pgs/story2.html (last visited Mar. 13, 2003).

^{74.} For an explication of the claims of DOCSIS 1.1 and 2.0, *see CABLELABS, DOCSIS, supra* note 38.

^{75.} See David Lieberman, Media Giants' Net Change Establish Strong Foothold Online, USA TODAY, Dec. 14, 1999, at B3 (Dan Somers was CEO of AT&T Broadband at the time the comment was reported).

^{76.} See BROADBAND REPORTS.COM, at http://www.dslreports.com (Mar. 2002).

who downloaded more than 2 gigabytes of bandwidth per day, or 30 gigabytes of bandwidth per month.⁷⁷ Other cable operators, though no DSL providers, have suggested similar policies may be on their way.⁷⁸ In addition, broadband consumers have complained of efforts to enforce specific bans on applications, such as threats to enforce contractual limits on VPN operations⁷⁹ and users who run file-sharing applications.⁸⁰

IV. A PROPOSAL FOR NETWORK NEUTRALITY

Recognizing that discrimination in broadband service is a potential problem is one thing; constructing an approach to dealing with it, is another. The open-access proposal, as we saw earlier, advocated structural separation between Internet service providers and broadband operators. This approach has the advantage of simplicity, but it has the disadvantage of retarding potential efficiencies of integration. This approach also may fail to deter other forms of discrimination.

What follows is a proposed antidiscrimination principle (a rule, only if necessary). The effort is to strike a balance: to forbid broadband operators, absent a showing of harm, from restricting what users do with their Internet connection, while giving the operator general freedom to manage bandwidth consumption and other matters of local concern. The principle achieves this by adopting the basic principle that broadband operators should have full freedom to "police what they own" (the local network) while restrictions based on inter-network indicia should be viewed with suspicion.

This non-discrimination principle works by recognizing a distinction between *local network* restrictions, which are generally allowable, and *inter-network* restrictions, which should be viewed as suspect. The principle represents ultimately an effort to develop *forbidden* and *permissible* grounds for discrimination in broadband usage restrictions.

^{77.} See Karl Bode, Defining Gluttony: Cox Cable Gets Specific, at http://www.dslreports.com/shownews/23465 (Nov. 12, 2002).

^{78.} John Borland, *ISP download caps to slow swapping?* CNET NEWS.COM, *at* http://news.com.com/2100-1023-975320.html (Nov. 26, 2002).

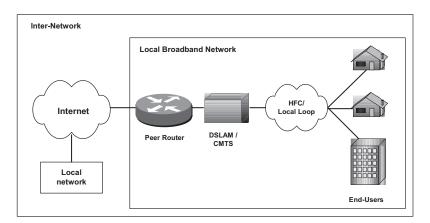
^{79.} Practically Networked Earthweb, VPN Comcast Letter, *at* http://www.practicallynetworked.com/news/comcast.htm. (last visited Mar. 10, 2003).

^{80.} Many users have accused cable operators of blocking specific file-sharing applications like KaZaa, through port blocking, though the reports are unverified. *See, e.g., RoadRunner Blocking kaZaA*, ZEROPAID.COM, *at* http://www.zeropaid.com/news/articles/auto/07142002a (July 13, 2002).

A. Let Operators Police What They Own

Broadband carriers are members of two networks. They are each members of a local network, which they own and manage individually. They are also members of the inter-network, which they collectively manage with other service providers.

FIGURE 1: BROADBAND CARRIERS, MEMBERS OF TWO NETWORKS



Once we recognize that carriers are engaged in a collective management scheme, the origin of the externalized cost problem described above becomes clear. The effects of local network restrictions will, usually, affect only the network run by a single service provider. Such restrictions moreover, are necessary for good network management. In contrast, by definition, restrictions at the inter-network layer or above will always affect the entire network, and can create externality problems.

B. The Neutrality Principle

What follows is an example of a network neutrality law:

- §___Forbidding Broadband Discrimination
- (a) Broadband Users have the right reasonably to use their Internet connection in ways which are privately beneficial without being publicly detrimental. Accordingly, Broadband Operators shall impose no restrictions on the use of an Internet connection except as necessary to:
 - (1) Comply with any legal duty created by federal, state or local laws, or as necessary to comply with any executive order,

warrant, legal injunction, subpoena, or other duly authorized governmental directive;

- (2) Prevent physical harm to the local Broadband Network caused by any network attachment or network usage;
- (3) Prevent Broadband users from interfering with other Broadband or Internet Users' use of their Internet connections, including but not limited to neutral limits on bandwidth usage, limits on mass transmission of unsolicited email, and limits on the distribution of computer viruses, worms, and limits on denial-of service-or other attacks on others;
- (4) Ensure the quality of the Broadband service, by eliminating delay, jitter or other technical aberrations;
- (5) Prevent violations of the security of the Broadband network, including all efforts to gain unauthorized access to computers on the Broadband network or Internet;
- (6) Serve any other purpose specifically authorized by the Federal Communications Commission, based on a weighing of the specific costs and benefit of the restriction.
- (b) As used in this section,
 - (1) "Broadband Operators" means a service provider that provides high-speed connections to the Internet using whatever technology, including but not limited to cable networks, telephone networks, fiber optic connections, and wireless transmission;
 - (2) "Broadband Users" means residential and business customers of a Broadband Operator;
 - (3) "Broadband Network" means the physical network owned and operated by the Broadband Operator;
 - (4) "Restrictions on the Use of an Internet Connection" means any contractual, technical, or other limits placed with or without notice on the Broadband user's Internet Connection.

This law expressed the inter-network neutrality principle, operationally, as a non-discrimination rule. As the analysis above recognized, the concept of a total ban on network discrimination is counterproductive. Rather, we need distinguish between forbidden grounds of discrimination, those that distort secondary markets, and permissible grounds, those necessary to network administration and harm to the network.

Reflecting the dual-network membership just described, it will be inter-network criteria of discrimination that cause concern. In technical terms, this means discrimination based on IP addresses, domain name, cookie information, TCP port, and others as we will describe in greater detail below. Hence, the general principle can be stated as follows: absent evidence of harm to the local network or the interests of other users, broadband carriers should not discriminate in how they treat traffic on their broadband network on the basis of inter-network criteria.

The negative inference (expressed most clearly in exceptions (a)(3) and (4)) is that operators generally may discriminate in their treatment of traffic on the basis of local network criteria. In technical terms, this means imposing restrictions on the basis of what network engineers call "link" or "layer 2" information, like bandwidth, jitter, or other local Quality of Service indicia.

C. In Practice: Online Gaming

Popular online gaming applications⁸¹ like Everquest, Asheron's Call, or Online Quake tend to be bandwidth intensive, particularly compared with episodic applications like email. As seen above, concerned broadband carriers have therefore been inclined to restrict the usage of such applications. However, with the neutrality principle in mind, we can distinguish between a "better" and a "worse" way for this to happen.

First, in today's environment, a broadband carrier could block traffic from gaming sites. It could do it either by enforcing a contractual provision in a usage agreement, or in the future, using its control of the local network to block traffic from gaming sites based on either application information, or the IP address of the application provider.⁸² Some carriers might elect, for a given supplemental fee, to remove the filter for specified users.

Under the neutrality principle here proposed, this approach would be frowned upon. Instead, a carrier concerned about bandwidth consumption would need to invest in policing bandwidth usage, not blocking individual applications. Users interested in a better gaming experience would then need to buy more bandwidth—not permission to use a given application.

The neutrality of such control would prevent the distortion in the market for Internet applications. If carriers choose to block online games in particular, this gives a market advantage to competing applications that have not been blocked. But if broadband carriers only police bandwidth, the result is an even-playing field. It may be that the expense

^{81.} Also commonly referred to as "Massively Multiple Online Games," or MMOGs.

^{82.} For an explanation of how a broadband carrier would do so, see, e.g., The Cisco Content Delivery Network Solution for the Enterprise, Cisco White Paper (Apr. 2002), available at http://www.cisco.com/warp/public/cc/so/neso/ienesv/cxne/cdnen_wp.htm; See also Cosine Communications., Digital Subscriber Lines and Managed Network-based Services: A Perfect—and Profitable—Marriage, White Paper, available at http://cnscenter.future.co.kr/resource/rsc-center/vendor-wp/cosine/dslwp.pdf.

2003]

of more bandwidth leads people to choose different ways to spend their money. But if so, that represents a market choice, not a choice dictated by the filtering policy of the broadband carrier.

D. Borrowing from Well-Established Categories

One advantage of the proposal is that it relies on well-established legal and technological criteria to achieve its consumer-welfare goals. Respectively, it borrows from principles of harm requirements and nondiscrimination familiar to lawyers, along with a local/inter-network distinction that is fundamental to Datacom networks.

1. The Harm Requirement

In the telephony context, the "foreign attachment" problem discussed above was addressed by a "harm" rule; that is, a rule barring the Bells from preventing attachment of equipment unless harm to the network could be shown. Its origins are found in the Hush-a-Phone case, where the FCC ordered Bell to allow telephone customers to attach devices that "[do] not injure . . . the public in its use of [Bell's] services, or impair the operation of the telephone system."⁸³

In the broadband context, it is discrimination against certain content and applications that is the major problem. But the practice of requiring public harm to justify restrictions can be usefully employed.

2. Local/Inter-Networking

Finally, on the technological side, the distinction between internetworking and local networking is very well established in the Datacom industry. While the distinction is best reflected, and usually discussed, in the context of the OSI network reference model (as the difference between layer 2 and layer 3 networks),⁸⁴ it is in fact independent of OSI. As a practical matter, different physical equipment and different protocols run the different networks. In a given network, "switches" run local networks, while "routers" collectively manage the layer 3 network. Services can be offered at both levels—for example, VPNs and telephony can be offered either as a layer 2 service or as a layer 3 service.

In addition, other schema used to describe network layers embody the same, fundamental, local / inter-network distinction. For example,

^{83.} Hush-A-Phone Corp. v. AT&T, 22 FCC 112, 114 (1957). This led in turn to the broader *Carterfone* decision, 13 F.C.C.2d 420 (1968), and finally Part 68, which adopted a protective circuitry approach to protecting the telephone network, *see* 47 CFR §68 *et seq.*

^{84.} Cf. ANDREW TANENBAUM, COMPUTER NETWORKS 10-18 (4th ed. 2002).

the TCP/IP network model maintains a distinction between the "link" layer and the "network" layer. This is exactly the same distinction as the layer 2/layer 3 distinction in the OSI model, and the local/inter-network distinction more generally. Again, this is no surprise, because virtual description simply reflects the physical network design. The existence and pervasiveness of the local / inter-network distinction makes it a natural dividing line for reasonable restrictions on use.

V. OBJECTIONS TO THE PROPOSED NETWORK NETRALITY REGIME

Before concluding, it is useful to consider some objections and challenges to the proposed network neutrality regime. We consider (1) whether it overly interferes with broadband carriers' ability to earn a return on their infrastructure investment, (2) whether local restrictions can be used to achieve the same problems as inter-network control, and (3) whether the principle interferes with administration of Internet addressing.

A. Return on Investment

First, does the neutrality principle restriction overly impinge on the ability of broadband carriers to earn a return from their infrastructure investments? While a full analysis of broadband economics is beyond the scope of this proposal, we can nonetheless suggest that the neutrality principle is unlikely to interfere with the special advantages that a carrier gains from building its own infrastructure.

The simple answer is that investing in a local network infrastructure creates its own rewards, as it creates particular advantages in the offering of network services. We can see this clearly by considering the particular example of Virtual Private Networks under the neutrality principle. A broadband operator who owns the local infrastructure has a natural advantage in offering local VPN services. The advantage comes from the fact that they can offer service level guarantees that cannot be provided on a shared network. Nothing in the neutrality principle would prevent a broadband operator from being in the unique position to sell such services.

But the principle would prevent operators from blocking use of Internet VPNs – that is, VPNs that used the Internet to reaches sites that no single local network can encompass. For example, a home user on the East Coast will almost certainly need to use an Internet VPN to connect to his business on the West Coast. In offering this service, a broadband operator is in the exact position as any other Internet VPN

provider. Restricting use of Internet VPNs should therefore not be allowed, to preserve undistorted competition for this application.

B. Can Local Control Disrupt Application Markets?

Some might observe that the local and inter-network are interdependent in certain ways. Won't broadband operators simply use their control over the local network to achieve the same distortion of application markets?

No rule can perfectly stamp out all undesirable behavior. The point of the network neutrality principle is to make interference with the application markets much harder. Without the ability to discriminate on the basis of the origin of a packet or the application being used, the broadband carrier is left with the far blunter tools of local restrictions.

It might be argued that the address resolution protocol (ARP)⁸⁵ could be used to achieve the same goals as IP-address filtering, since the job of ARP on a typical network is to convert IP addresses into Ethernet MAC addresses. But, in fact, a broadband carrier manipulating ARP could only succeed in making his own users unreachable. The ARP-cache only holds the information to match up local physical addresses with local IP addresses. ARP has no idea how to stop a user from reaching a specific IP address, other than making that user unreachable. The example shows, in fact, the power of limiting a broadband carrier to local control.

C. The Need to Administer IP

Finally, some might point out that broadband carriers need some control over the Internet Protocol side of their network. They must, for example, be able to allocate static and dynamic IP addresses, maintain routing tables, and so on. Does the network neutrality principle interfere with this?

The point of the neutrality principle is not to interfere with the administration of the Internet Protocol side of a broadband carrier's network. It is, rather, to prevent discrimination in that administration. Since it is phrased as a non-discrimination principle, a negative inference is that most aspects of IP administration can be conducted without concern. For example, the allocation and administration of IP

^{85.} Described in IETF RFC 826, available at http://www.ietf.org/rfc/rfc1027.txt.

addressing should not pose any discrimination problems, so long as the administration of such addresses is in an even-handed manner. 86

VI. CONCLUSION

The goal of this paper was to make an initial case for a broadband discrimination regime as an alternative to the structural remedy of open access to achieve the goal of network neutrality. At this point, the newness of the concept means much unavoidable vagueness as to its operation. It is easier to point out examples of application discrimination that seem unjustified than to elucidate a standard that nearly separates the legitimate from the suspect. For example, there remains much work to better define what the concepts of network neutrality and discrimination would fully entail as a regulatory matter, or even as a regulatory threat. Should neutrality be defined by IETF standards? The intuitions of network theorists? Government definition? Any workable regime designed to achieve network neutrality will need a more precise conception of this and other matters. Nonetheless, the hope is that the general framework described here might serve to begin the effort to discourage the most blatant or thoughtless disfavoring of certain application types through network design.

^{86.} In today's environment, the scarcity of IPv4 addresses does appear to justify a form of discrimination: charging more for static addresses, than dynamic addresses. This forms a good example of "permissible" discrimination.

APPENDIX SURVEY OF BROADBAND USAGE RESTRICTIONS

CABLE OPERATORS:

RESTRICTION	AT&T BB	ΜŢ	CMCST	CMCST CHARTR	COX	Adphia	CABLEV	Adphia CABLEV MEDIACM INSIGHT	INSIGHT	CABLE1	FREQ
Virtual Private Network					R						10%
Attachment of WiFi Eqpt.	R										10%
Being Network End Point		R									10%
Home Networking	R		R			R		R			40%
Misuse of IP Addresses	R	R	R		R	R	R				60%
Commercial / Business Use	R	R	R	R	R	R	R	R	R	R	100%
Operating Server / Public Info	R	R	R	R	R	R	R	R	R	R	100%
Overuse of Bandwidth	R	R	R	R	R	R	R	R	R	R	100%
Resell Bandwidth / Act as ISP	R	R	R	R	R	R	R	R	R	R	100%
Spam / Consumer Fraud	R	R	R	R	R	R	R	R	R	R	100%
Hacking/Security Breaches	R	R	R	R	R	R	R	R	R	R	100%
Any Unlawful Purpose	R	R	R	R	R	R	R	R	R	R	100%
Any Offensive or Immoral Purpose	R	R	R	R	R	R	R	R	R	R	100%

2003]

		DSL OPERATORS:	TORS:				
RESTRICTION	VERIZON	SBC	QWEST	BELLS	Sprnt	WLDCM	FREQ
Home Networking	OK	OK			OK		0%0
Operating a Server	R			R	OK		40%
Commercial / Enterprise / Business Use	R			R			40%
Overuse of Bandwidth	R			R			40%
Resell Bandwidth	R			R			40%
Spam / Consumer Fraud	R	К	R	R	R	R	100%
Hacking / Security Breaches	R	R	R	R	R	R	100%
Any Offensive or Immoral Purpose	R	R	R	R	R	R	100%
	T amond.						
	regena:						
	R = Contractually Restricted	ally Restricted	Ħ	AT&T BB = AT&T Broadband	AT&T Broad	band	
	OK = Explicitly Permitted	ly Permitted		TW = Time Warner	Varner		

DSI Or

CmCst = ComCast Communications Insight = Insight Communications Cox = Cox CommunicationsCableV = CableVision, Inc. BellS = BellSouth

Adphia = Adelphia Communications Chartr = Charter Communications MediaCM = MediaCom Cable1 = CableOneSprnt = Sprint

Provider	BANDWIDTH	BANDWIDTH	
NAME	DOWN (K)	UP (K)	Ratio
Qwest	256	256	1:01
	640	256	2.5:1
Sprint	256	96	2.66:1
	512	128	4:01
VERIZON	1.5M	256	6:01
	768	128	6:01
	1.5M	128	12:01
SBC	384	128	3:01
BellSouth	1.5M	256	6:01
WorldCom	1.5M	256	6:01
	384	128	3:01
AT&T BB	1.5M	256	6:01
	3M	384	8:01
TIME WARNER	2	384	5.33:1
Cox	3M	256	12:01

UPSTREAM / DOWNSTREAM BANDWIDTH RATIOS

OPEN COMMUNICATIONS PLATFORMS:

THE PHYSICAL INFRASTRUCTURE AS THE BEDROCK OF INNOVATION AND DEMOCRATIC DISCOURSE IN THE INTERNET AGE

MARK COOPER^{*}

"Ideas should freely spread from one to another over the globe, for the moral and mutual instruction of man, and improvement of his condition." Thomas Jefferson, 1813

I. A KING'S RANSOM TO FREE CODE AND CONTENT FROM THE TYRANNY OF FACILITIES

This article offers a normative perspective on regulating communications platforms. The primary economic goal for communications platforms should be to enhance progress – promoting the economic well being of consumers by expanding output and distributing it in an equitable manner.¹ The primary political goal should be to enrich civic discourse – improving the ability of citizens to participate effectively in writing the rules under which they live.² By doing so, a more informed populace will actually be shaping the political institutions in which they live, and this will reflect a closer fit between communications platforms and other realms of society.³

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^{1.} See F.M. Scherer & David Ross, Industrial Market Structure and Economic Performance 4 (3d ed. 1990).

^{2.} LAWRENCE LESSIG, CODE AND OTHER LAWS OF CYBERSPACE 225-30 (1999) [hereinafter LESSIG, *CODE*].

^{3.} See Mark N. Cooper, Inequality in the Digital Society: Why the Digital Divide Deserves All the Attention it Gets, 20 CARDOZO ARTS & ENT. L.J. 73 (2002) [hereinafter Cooper, Inequality] (outlining a comprehensive paradigm identifying four realms of social order); Mark Cooper, Open Access to the Broadband Internet: Technical and Economic Discrimination in Closed, Proprietary Networks, 71 U. COLO. L. REV. 1011 (2000) [hereinafter Cooper, Open Access] (stating an application to the broadband Internet).

This article is normative in nature because as with any public policy debate about regulation, the debate about actions shapes the world according to specific values. Thus, whenever the exercise of choice is informed by values, either based on business or political viewpoints, the policies that reflect those values are necessarily normative.⁴ Those of us involved in the debate over whether and how to regulate communications platforms should be up front about the values we seek to attain before we engage in debate.

The article defines communications broadly because technological convergence is eliminating the archaic distinction between "communications" and "telecommunications." As evidence, much of the contemporary debate over regulation focuses not on the one-to-one exchange of information that typifies telecommunications, but on the production and exchange of information that involves the mass media (via one-to-many, many-to-one, and many-to-many relationships).⁵

The title of this article uses the term "communications platform" as a matter of principle and strategy. As used in the current debate over communications regulation, the term "information" takes on a strong connotation of a commodity produced by one party and sold or distributed to a passive consumer.⁶ But, the current debate is really about the much more profound effects that flow from the convergence of consumption and production—the transformation of consumers into users.⁷ The current regulatory debate also encompasses the process of

LESSIG, CODE, supra note 2, at 209.

^{4.} Lessig refers to the framers of the Constitution and offers the following observation: [T]heir lessons should be our lessons. What they learned was that liberty does not necessarily follow from having a space of no government. Freedom from governmental tyranny may be a necessary condition for liberty, but it is not sufficient. More important, government is necessary to help establish the conditions necessary for liberty to exist. This is because there are collective values that, acting as individuals, we will not realize. These collective values are sometimes values of liberty, which governments can act to establish and support. The freedom to contract, to own property, to travel, to vote – all of these rights require massive governmental support.

The decision then is not about choosing between efficiency and something else, but about which values should be efficiently pursued \dots [T]o preserve the values we want, we must act against what cyberspace otherwise will become. The invisible hand, in other words, will produce a different world. And we should choose whether this world is one we want.

Id.

^{5.} See Phil Weiser, Networks Unplugged: Toward a Model of Compatibility Regulation Between Communications Platforms (paper presented at Telecommunications Policy Research Conference, Oct. 27, 2001) (adopting this position as well), at http://www.arxiv.org/html/cs/0109070 (last visited Jan. 24, 2003).

^{6.} See C. EDWIN BAKER, MEDIA, MARKETS AND DEMOCRACY 297-307 (2002).

^{7.} See Yochai Benkler, From Consumers to Users: Shifting the Deeper Structures of Regulation Toward Sustainable Commons and User Access, 52 FED. COMM. L.J. 561 (2000)

political participation and engagement in civic discourse. This discourse has little to do with the commercial value or the stated business intent of information products.⁸

Pragmatically, "information" has been transformed into a regulatory word, and one that is being tortured for political purposes. Historically, communications functions, which were regulated, were defined to be clearly distinguished from information or video services, which were not. Currently, the definitions of information and cable services are being distorted to include communications functions, thereby deregulating communications through the back door.⁹

Communication platforms hold a special role in the "new" economy. By understanding the unique role that information has historically played in the American polity, this article argues that communications platforms should be kept open. Specifically, this article argues that the physical layer of facilities (the infrastructure of communications) must remain accessible to consumers and citizens, for it is the most fundamental layer in which to ensure equitable access to the rest of the communications platform. An open communications platform promotes a dynamic space for economic innovation and a robust forum for democratic discourse.¹⁰ The role of regulation should be to ensure that strategically placed actors (perhaps by historical favor) cannot deter expression or innovation at any

[[]hereinafter Benkler, Consumers to Users]; see also MANUEL CASTELLS, THE INTERNET GALAXY (2001).

^{8.} See C. EDWIN BAKER, Giving Up on Democracy: The Legal Regulation of Media Ownership, Comments of Consumers Union, Consumer Fed'n of Am., Civil Rights Forum, Ctr. for Digital Democracy, Leadership Conference on Civil Rights and Media Access Project, to the Cross Ownership of Broadcast Stations and Newspapers and Newspaper/Radio Cross-Ownership Waiver Policy, Attachment C to Order, 16 F.C.C.R. 22,163 (2001) (on file with author); see also Yochai Benkler, Siren Songs and Amish Children: Autonomy, Information, and Law, 76 N.Y.U. L. REV. 23 (2001); Yochai Benkler, Through the Looking Glass: Alice and the Constitutional Foundations of the Public Domain (paper presented at the Conference on the Public Domain, Duke University Law School, Nov. 9-11, 2001), at http://www.law.duke.edu/pd/papers/benkler.pdf (last visited Jan. 24, 2003); Yochai Benkler, Property Commons, and the First Amendment: Towards a Core Common Infrastructure (paper presented at Brennan Center for Justice, New York University Law School, Mar. 2000), at http://www.law.nyu.edu/benklery/WhitePaper.pdf (last visited Jan. 24, 2003) [hereinafter Benkler, Toward a Core Common Infrastructure]; Yochai Benkler, Free as the Air to Common Use: First Amendment Constraints on Enclosure of the Public Domain, 74 N.Y.U. L. REV. 354 (1999).

^{9.} Regarding Digital Television: Before the Senate Commerce Comm., (Statement of Dr. Mark Cooper, Director of Research Consumer Federation of America, on Behalf of Consumer Federation of America and Consumers Union), (Mar. 1, 2001), available at http://www.senate.gov/~commerce/hearings/0301coo.pdf (last visited Jan. 24, 2003); Jim Chen, The Authority to Regulate Broadband Internet Access Over Cable, 16 BERKELEY TECH. L.J. 677 (2001) (suggesting the entirely reasonable, but politically infeasible, approach of defining broadband access as an information service and then regulating it).

^{10.} As discussed below, in the information age it is important to recognize that the commercial marketplace is not the only space for economic innovation.

layer of the platform. This is best achieved by mandating that the core infrastructure of the communications platform remain open and accessible to all.

We are in a critical moment to reaffirm a commitment to open communications platforms because technological and institutional developments in information production are beginning to fulfill the promise of a substantial improvement in both the economy and the polity. The PC-driven Internet has been proven to be an extremely consumer-friendly, citizen-friendly environment for innovation and expression. This has resulted from a largely "open" physical layer— open in the sense of communications devices and transmission networks. The logical or code layer should be open as well, if the end-to-end principle of the Internet is to be fully realized. The end-to-end principle allows interconnection and interoperability in a manner that is particularly wellsuited to the economic and political goals identified above. The transparency of the network, and its reliance on distributed intelligence, foster innovation and empower speakers at the ends of the network.

The chaos of economic experimentation and the cacophony of democratic discourse that emanates from an open communications platform model is music to my ears, but the ongoing closure of the third generation Internet has already begun to quiet the chorus. With high speed Internet facility owners refusing to deal with unaffiliated Internet Service Providers (ISPs), banning services that might compete with their core monopoly products and restricting which applications are available to consumers, the communications platform is closing rapidly.¹¹

This article argues for an open physical layer in the communications platform. The physical layer of the communications platform is too critical a choke point to risk a closed layer. The physical layer is controlled by too few owners of dominant technology, which makes it too easy to manipulate the platform as a whole. These owners employ singular, narrow motives and leverage market power in order to protect existing monopoly rents to achieve domination over neighboring products. Thus, these players are in a unique position to affect the entire communications platform. If this is allowed to continue, the inevitable economic result will be a lessening of competition and a denial of consumer choice leading to slowing of innovative. The result in the polity will be to confer excessive influence to platform owners and, more importantly, undermine an opportunity to enrich civic discourse through more active involvement of the citizenry.

Although the concept of an open communications platform is under attack at all layers, this article focuses on the physical layer because the

^{11.} Cooper, Open Access, supra note 3, at 1042-59.

current strategies and tactics of dominant players controlling physical facilities raises strong concerns which demands immediate responses to stymie the entrenchment of a closed bottleneck at the heart of the platform. Owners of closed facilities have kidnapped the high-speed Internet access market. The closure of the physical layer of the communications platform is a fundamental avenue to undermine a basic tenet of the Internet. Policymakers must move quickly to rescue the Internet by preserving an open physical layer within the communications platform.

Doing so will reaffirm the principle of non-discriminatory access to communications networks, and the principle of end-to-end access, both of which have succeeded in the past. Facility owners are mounting a vigorous campaign of resistance, which has made policy makers and law enforcement authorities hesitant to act. If we cannot force current players to open the physical layer, then perhaps the next best solution may be to pay the ransom necessary to have the facilities provisioned. As long as we get the hostage – an open physical architecture – back, the price will be worth it.

This article provides support for both an open physical platform for the Internet, and refutes the arguments in favor of a closed one. Section II begins by making the case for open platforms in the economy. It explains why an open platform is best suited for disseminating modern information, both economically and politically. In Section III, this paper presents and refutes the arguments in favor of closed platforms, employing general economic arguments that criticize the economics of monopoly market power and vertical integration. Section V examines the anticompetitive and discriminatory practice in the case of the closed physical facilities of the broadband Internet infrastructure. As an example, Section VI reviews the history of the anticompetitive, discriminatory business model of cable owners in protecting their core business (video services). Since cable TV has been a closed platform, and the facility owners are seeking to extend their closed model to the high speed Internet, this traditional platform serves nicely as an economic and practical model for what can happen if the physical architecture is allowed to remain closed. Finally, Section VI briefly reviews some practical suggestions for implementing an open communications platform given a current climate of proprietary networks.

II. THE CASE FOR OPEN COMMUNICATIONS PLATFORMS

A. The Economics of Information

1. The Communications Platform as an Economic Model

Yochai Benkler provides a framework with critical insights into the analysis of information production, particularly for understanding the principles of openness that have defined the communications platforms in the Internet age.¹² In this framework, a communications platform is an environment in which information is produced. Benkler uses a layered model to delineate various informational functions within the platform (physical, logical or code, applications, content).¹³

The physical layer consists primarily of two tangible assets, communications devices and transmission media. The logical layer contains the codes, standards or rules with which appliances interconnect, interoperate and communicate. The applications layer contains programs that execute tasks for the user. The content layer involves information products. When combined, these layers represent a coherent platform for describing the complementarities between and among the various informational functions.¹⁴ This article focuses on the physical layer of this communications platform framework to analyze public policy regarding information production both historically as it

^{12.} See Yochai Benkler, Intellectual Property and the Organization of Information Production, 22 INT'L REV. L. & ECON. 81 (2002), available at http://www.law.nyu.edu/benklery/IP&Organization.pdf, (last visited Jan. 24, 2003) [hereinafter Benkler, Intellectual Property]; Yochai Benkler, Coase's Penguin, or Linux and the Nature of the Firm (paper presented at the Conference on the Public Domain, Duke University Law School, Nov. 9-11, 2001), at http://www.law.duke.edu/pd/papers/ Coase's_Penguin.pdf (last visited Jan. 24, 2003) [hereinafter Benkler, Coase's Penguin]; Yochai Benkler, The Battle Over the Institutional Ecosystem in the Digital Environment, COMM. ACM, Feb. 2001, at 84, available at http://www.law.nyu.edu/benklery/CACM.pdf (last visited Jan. 24, 2003) [hereinafter Benkler, Institutional Ecosystem].

^{13.} See Benkler, Consumers to Users, supra note 7; see also LAWRENCE LESSIG, THE FUTURE OF IDEAS 273 n.13 (2001) [hereinafter LESSIG, THE FUTURE OF IDEAS] (noting that TIM BERNERS-LEE, WEAVING THE WEB: THE ORIGINAL DESIGN AND ULTIMATE DESTINY OF THE WORLD WIDE WEB BY ITS INVENTOR 129-30 (1999), identified four layers: transmission, computer, software and content).

^{14.} See Weiser, supra note 5, at 1; see also Richard N. Langlois, Technology Standards, Innovation, and Essential Facilities: Toward a Schumpeterian Post-Chicago Approach, in DYNAMIC COMPETITION & PUB. POLICY: TECHNOLOGY, INNOVATIONS, AND ANTITRUST ISSUES 193, 207 (Jerry Ellig ed., 2001), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=204069 (last visited Jan. 24, 2003) (calling platforms "system products" – "Most cumulative technologies are in the nature of system products, that is, products that permit or require the simultaneous functioning of a number of complementary components.").

developed during the industrial age, and as it is now, at the start of the Internet age.

In general, information production exhibits the characteristics of a public good, with positive externalities and high first copy costs.¹⁵ These properties are the launch pad for an economic analysis of information. The public good character of information derives from the fact that it is significantly non-excludable and nonrivalrous.¹⁶ In a truly open environment, once information is produced, it is difficult to prevent it from being shared by users; and the consumption of information (reading or viewing) by one person does not detract from the ability of others to derive value from consuming it.¹⁷

Information frequently has positive direct and indirect externalities (and occasional negative externalities) associated with its production. Information creates benefits to bystanders that cannot be easily captured in the transactions between the private parties to the exchange of information. This characteristic of information plays an important role when considering the nature of the information environment created by the Internet, as discussed below.

In some respects, information is also subject to network effects.¹⁸ The production and distribution of information becomes more valuable as more people gain access to it. Information is also a major input to its own output, which creates a feedback effect. Where network effects and feedbacks are direct and strong, they create positive feedback loops. Putting information into the world enables subsequent production at lower cost by its original producers or others (because of its public good nature).

To the extent that information and communication are extremely important inputs into the production process for other goods and services, they have a special economic role.¹⁹ They are even often viewed as infrastructure.

^{15.} See Benkler, Intellectual Property, supra note 12, at 5; see also BAKER, supra note 6, at 8-14.

^{16.} CARL SHAPIRO & HAL R. VARIAN, INFORMATION RULES: A STRATEGIC GUIDE TO THE NETWORK ECONOMY 22-23 (1999).

^{17.} BAKER, supra note 6, at 8; BRUCE OWEN, THE INTERNET CHALLENGE TO TELEVISION 63 (1999) (noting that these characteristics are changeable as technology changes). In the digital information age, the ability to encrypt or otherwise prevent access to information may make it excludable.

^{18.} SHAPIRO & VARIAN, supra note 16, at 13-17 (explaining that network effects are sometimes referred to as demand-side, positive externalities).

^{19.} ALFRED KAHN, THE ECONOMICS OF REGULATION: PRINCIPLES AND INSTITUTIONS 11 (1988) (noting that "these industries constitute a large part of the 'infrastructure' uniquely prerequisite to economic development" and "as Adam Smith recognized, the division of labor is limited by the extent of the market, and the latter depends in turn on the price and availability of transportation").

2. Information Production in the Industrial Age

Over the past century-and-a-half, information production has exhibited economies of scale typical of the industrial age.²⁰ Capitalintensive technologies and high first copy costs created substantial economies that dictated very large-scale production. This was not always the case, nor need it be in the future, but it has been a fact of life for information production in the industrial age.

These information products also exhibit significant nonsubstitutability and strong preferences.²¹ Different types of information products and institutions have evolved to fill different needs and provide different functions. Print, voice, and video each have very different attributes. They require different types and levels of attention. They tend to convey different types and qualities of information. The result is that there is little ability for individuals to find substitutes for certain media products or institutions.²²

Analysts recognize that these characteristics of information render it highly unlikely that its markets will be made up of numerous companies competing vigorously (atomistically competitive markets).²³ Rather,

^{20.} High first copy costs are an enduring quality of information that is reinforced in the industrial age by the presence of high capital costs. In the pre-industrial and (perhaps) post-industrial periods first copy costs entail high human capital costs.

^{21.} See BAKER, supra note 6; Joel Waldfogel, Who Benefits Whom in Local Television Markets?, at http://rider.wharton.upenn.edu/~waldfogj/tv.pdf [hereinafter Local Television]; Waldfogel, Comments on Consolidation and Localism, Roundtable On FCC Ownership Policies (Oct. 29, 2001) at http://www.fcc.gov/ownership/roundtable_docs/waldfogel-stmt.pdf.

^{22.} Waldfogel, Local Television, supra note 21; Joel Waldfogel, Preference Externalities: An Empirical Study of Who Benefits Whom in Differentiated Product Markets (Oct. 1999), at http://papers.nber.org/papers/w7391.pdf; Peter Siegelman & Joel Waldfogel, Race and Radio: Preference Externalities, Minority Ownership and the Provision of Programming to Minorities (Oct. 24, 2001), at http://www.fcc.gov/ownership/roundtable_docs/waldfogelc.pdf; Lisa George & Joel Waldfogel, Who Benefits Whom in Daily Newspaper Markets? (Oct. 2000), at http://www.fcc.gov/ownership/roundtable_docs/waldfogel-a.pdf.

^{23.} See SHAPIRO & VARIAN, supra note 16, at 22-23. The characteristics of information goods are as follows:

Information is costly to produce but cheap to reproduce.

Once the first copy of an information good has been produced, most costs are sunk and cannot be recovered.

Multiple copies can be produced at roughly constant per-unit costs.

There are no natural capacity limits for additional copies.

These cost characteristics of information goods have significant implications for competitive pricing strategy. The first and most important point is that markets for information will not, and *cannot*, look like text-book perfect competitive markets in which there are many suppliers offering similar products, each lacking the ability to influence prices.

Id.

information markets tend to be tight, differentiated oligopolies or monopolistically competitive.²⁴

Public policy in the industrial age was centrally concerned with preventing the abuse of market power and promoting competition at all layers of the communications platform through a wide range of mechanisms. At various times, and in different layers, this policy included structural regulation of ownership of physical facilities (e.g. cable operators could not own television stations, telephone companies could not own cable TV companies), requirements for interconnection and carriage of data, the setting of standards in the logic layer, provision of specific applications (e.g., relay service, touchtone) public interest obligations in programming (content layer), and regulation of rates.

One of the more consistent goals in promoting competition has been to mandate non-discriminatory carriage.²⁵ The most recent iteration of this policy led to the development of the Internet. Using the Internet as a model, we find that the deeper the principle of openness is embedded in the communications system, the more stimulus there is for information production and innovation.²⁶

[T]he government's activism imposed a principle analogous to [end-to-end] design on the telephone network. Indeed, though it masquerades under a different name (open access), this design principle is part and parcel of recent efforts by Congress and the FCC to deregulate telephony... By requiring the natural monopoly component at the basic network level to be open to competitors at higher-levels, intelligent regulation can minimize the economic disruption caused by that natural monopoly and permit as much competition as industry will allow.

^{24.} See id. at 54, 87-89.

^{25.} Sections 251, 252 and 271 of the Telecommunications Act of 1996, which have been the focus of an immense amount attention, imposed extremely strict interconnection and carriage requirements.

^{26.} 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, 935 (2001) [hereinafter Lemley & Lessig, The End of End-to-End] (written as a direct response to James P. Speta, Written Ex Parte, Application for Consent to the Transfer of Control of Licenses MediaOne Group, Inc. to AT&T Corp. FCC DOC. NO. 99-251 (1999)).

Id.

See also James B. Speta, The Vertical Dimension of Cable Open Access, 71 U. COLO. L. REV. 975 (2000); Phil Weiser, Paradigm Changes in Telecommunications Regulation, 71 U. COLO. L. REV. 819 (2000) (responding to an earlier piece by Lemley & Lessig, Written Ex Parte, Application for Consent to Transfer Control of Licenses of MediaOne Group Inc. to AT&T Corp., FCC DOC. NO. 99-251 (1999), available at http://cyber.law.harvard.edu/ works/lessig/filing/lem-les.doc.html [hereinafter, Lemley & Lessig]); See also Weiser, supra note 5 (as another direct response to Lemley & Lessig, End of End-to-End.).

3. Information Production In The Internet Age

a. Declining Costs

A dramatic shift in the economics of the information environment has taken place altering the relative cost and importance of the factors of information production. The growth of the Internet, and its underlying technologies, changed the fundamental economics of information production. "As rapid advances in computation lower the physical capital cost of information production, and as the cost of communications decline, human capital become the salient economic good involved in information production."²⁷

Historically, changes dramatic communications in and transportation technology affected society deeply.²⁸ The ongoing technological revolution does so as well, but in a more profound way.²⁹ The computer and communications industries have high fixed and frontend costs, which result in economies of scale. This is similar to many technologies that have developed over the past century.³⁰ Computers and communications also exhibit virtuous circles and network effects. Advances in computing technology support more advances in computing technology. This process is observed at the level of hardware³¹ and in the organizational process.³²

At the physical layer, cheap, powerful computers, routers, switches and high capacity fiber optic cable are the rapidly proliferating physical

^{27.} See Benkler, Coase's Penguin, supra note 12, at 2.

^{28.} Following Lessig's paradigm of modalities of regulation as interpreted as realms of social order in Cooper, *Inequality, supra* note 3, we can track the technological transformation affecting the economy (*see* BRIE-IGCC E-CONOMY PROJECT, TRACKING A TRANSFORMATION: E-COMMERCE AND THE TERMS OF COMPETITION IN INDUSTRIES (2001)), the polity (*see* GOVERNANCE.COM: DEMOCRACY IN THE INFORMATION AGE (Elaine Ciulla Kamarck & Joseph S. Nye Jr. eds., 2002)) and civic institutions (*see* JEREMY RIFKIN, THE AGE OF ACCESS: THE NEW CULTURE OF HYPERCAPITALISM, WHERE ALL OF LIFE IS A PAID-FOR EXPERIENCE chs. 11-12 (2000); ANDREW L. SHAPIRO, THE CONTROL REVOLUTION: HOW THE INTERNET IS PUTTING INDIVIDUALS IN CHARGE AND CHANGING THE WORLD WE KNOW chs. 20-21 (1999)).

^{29.} See Ida Harper Simpson, Historical Patterns of Workplace Organization: From Mechanical to Electronic Control and Beyond, CURRENT SOC. 47 (Apr. 1999); BARRY BLUESTONE & BENNETT HARRISON, GROWING PROSPERITY: THE BATTLE FOR GROWTH WITH EQUITY IN THE TWENTY-FIRST CENTURY (2001) (seeking historical parallels to previous technological revolutions, ultimately acknowledge uniqueness of current transformation); George Evans et al., Growth Cycles, 88 AM. ECON. REV. 495 (1998).

^{30.} W. KIP VISCUSI ET AL., ECONOMICS OF REGULATION AND ANTITRUST ch. 15 (3d ed. 2000).

^{31.} Brian R. Gaines, *The Learning Curves Underlying Convergence*, 57 TECH. FORECASTING & SOC. CHANGE 7, 20-21 (1998).

^{32.} See W. Brian Arthur, Positive Feedbacks in the Economy, 262 SCI. AM. 95, 98 (Feb. 1990).

infrastructure of the digital economy that allow communications at rising speeds with falling costs.³³ In the code and applications layer, a software revolution is the nervous system that enables the messages to be routed, translated, and coordinated.³⁴

Standardized and pre-installed bundles of software appear to have allowed the rapidly expanding capabilities of computer hardware to become accessible and useful to consumers with little expertise in computing. At the content layer, every sound, symbol, and image can now be digitized.³⁵ The more complex the sound or image, the more data has to be encoded and decoded to accomplish the digital representation.³⁶ But, when computing speeds, storage capacity and transmission rates become big enough, fast enough, and cheap enough, it becomes feasible to move huge quantities of voice, data, and video over vast distances.

The orders of magnitude of change that underlie the growth in the computer and communications industries are enormous.³⁷ Since the first desktop computers began to enter the residential market about twenty years ago, desktop computers have undergone a remarkable transformation.

Texas Instruments introduced the first computer chip to the world in 1958. Since then the semiconductor has been doubling in capacity and speed ... almost every 18 months.... Today the microchip contained in a single laptop computer has more computing power than all the computers used in all the universities across the country in 1950. The cost of processing information and data that once might have been hundreds of thousands, if not millions, of dollars is rapidly falling to zero. The IBM-370-168 mainframe (circa 1975) sold for \$3.4 million; today a personal computer with an Intel Pentium chip retails for about \$1,500 and is nearly 1,000 times faster.³⁸

The changes that result from this immense increase in computing and communications capacity arise not only because of the intensity of

^{33.} SARA BAASE, A GIFT OF FIRE: SOCIAL, LEGAL AND ETHICAL ISSUES IN COMPUTING (1997); GEORGE GILDER, TELECOSM: HOW INFINITE BANDWIDTH WILL **REVOLUTIONIZE OUR WORLD (2000).**

^{34.} See Gaines, supra note 31.35. OWEN, supra note 17, at 29.

^{36.} Id. at 151.

^{37.} Gaines, supra note 31, at 20. See, e.g., JAMES GLEICK, FASTER: THE ACCELERATION OF JUST ABOUT EVERYTHING (1999); Jeffrey L. Sampler, Redefining Industry Structure for the Information Age, ENGINEERING MGMT. REV., Summer 1999, at

^{38.} Stephen Moore & Julian L. Simon, The Greatest Century That Ever Was: 25 Miraculous U.S. Trends of the Past 100 Years, at 24 (Cato Inst. Policy Analysis No. 364, 1999), available at http://www.cato.org/pubs/pas/pa364.pdf (last visited Jan. 24, 2003).

use of the factors of production, or even its speed, but because there has been a fundamental change in the relationships between the factors of information production.³⁹ Because computing intelligence can be distributed widely, and the activities of the end-points communicated so quickly, interactivity is transformed. Users become producers as their feedback rapidly influences the evolution of information products.

The institutional forms that will expand are those that economize on the most valuable factor of production (now human capital) by reducing cost or maximizing output. Alternatively, the scarcest or most critical input to production becomes the focal point of attention in economic activity.⁴⁰ This makes it possible for a wholly new form of information production – based on peer-to-peer relationships – to exist on a sustainable basis.⁴¹ By drawing on a broad and diverse supply of human capital, a loose, collaborative approach can provide a potent mechanism for production.

Id.

Id.

40. See Langlois, supra note 14.

Peer production is emerging as an important mode of information production because of four attributes of the pervasively networked information economy. First, the object of production – information – is quirky, in that (a) it is purely non-rival and (b) its primary non-human input is the same public good as its output – information. Second, the physical capital costs of information production have declined dramatically with the introduction of cheap-processor-based computer networks. Third, the primary human input – creative talent – is highly variable, more so than traditional labor, and the individuals who are the "input" possess better information than anyone else about the variability and suitability of their talents and level of motivation and focus at a given moment to given production tasks. Fourth and finally, communication and information exchange across space and time are much cheaper and more efficient than ever before, which permits the coordination of widely distributed potential sources of creative effort and the aggregation of actual distributed effort into usable end products.

Peer production better produces information about available human capital, and increases the size of the sets of agents and resources capable of being combined in projects – where there are increasing returns to scale for these sets.

^{39.} See CASTELLS, supra note 7, at 28. Note that the telephone is an industrial age communications platform with significant network effects, but does not exhibit the feedback loops or virtuous circles of information age communications platforms.

It is a proven lesson from the history of technology that users are key producers of the technology, by adapting it to their uses and values, and ultimately transforming the technology itself, as Claude Fischer... demonstrated in his history of the telephone. But there is something special in the case of the Internet. New uses of the technology, as well as the actual modifications introduced in the technology, are communicated back to the whole world, in real time. Thus, the timespan between the process of learning by using and producing by using is extraordinarily shortened, with the result that we engage in a process of learning by producing, in a virtuous feedback between the diffusion of technology and its enhancement.

^{41.} See Benkler, Coase's Penguin, supra note 12, at 22-23.

The impact of this shift in information production is not limited to new organizational forms (such as peer-to-peer production). Those who have studied corporate changes in the last quarter of the twentieth century have found similar patterns.⁴² The new thrust of corporate organization, based on distributed intelligence and a flat structure, reflects these forces.⁴³ Hierarchy is out; horizontal is in.⁴⁴ The ability to coordinate at a distance dramatically alters the nature of centralized control, transferring much decision-making to dispersed management. A Harvard Business School Press publication, graphically titled *Blown to Bits*, summarized the dramatic change compelling corporate adjustment as follows:

Digital networks finally make it possible to blow up the link between rich information and its physical carrier. The Internet stands in the same relation to television as did television to books, and books to stained-glass windows. The traditional link... between the economics of information and the economics of things – is broken.⁴⁵

When such a dramatic change takes place in a technology that is critical to a variety of activities the effects are felt throughout society.

b. Increasing Competition and Innovation

These developments in information space proved to be extremely pro-competitive. The economic arguments in favor of competition are familiar⁴⁶ – efficient allocation of resources, absence of excess profit, lowest cost production, and a strong incentive to innovate.⁴⁷ To be sure, industrial age economics, with its large economies of scale, renders perfect or atomistic competition rare, but the competitive goal itself remains important.⁴⁸ Therefore, the relative competitiveness of markets receives a great deal of attention, specifically upon the conditions that make markets more competitive or workably competitive.⁴⁹

The Internet unleashed competitive processes and innovation exhibiting the fundamental characteristics of audacious or atomistic

^{42.} See Cooper, Inequality, supra note 3, at 93.

^{43.} MARINA V.N. WHITMAN, NEW WORLD, NEW RULES 17, 32-37, 55-62 (1999).

^{44.} See MANUEL CASTELLS, THE RISE OF NETWORK SOCIETY (1996); RICHARD C. LONGWORTH, GLOBAL SQUEEZE (1998).

^{45.} PHILIP EVANS & THOMAS S. WURSTER, BLOWN TO BITS: HOW THE NEW ECONOMICS OF INFORMATION TRANSFORMS STRATEGY 17 (2000) (footnote omitted).

^{46.} See SCHERER & ROSS, supra note 1, at 20.

^{47.} See id. at 19-21.

^{48.} See id. at 16-17.

^{49.} See id. at 53-54.

competition.⁵⁰ Decentralized experimentation by users who had command over increasing computing power created the conditions for a dramatic increase in innovation. ⁵¹ Openness of the communications network was central to this newly dynamic environment. Moreover, the flourishing of a new, collaborative mode of information production may provide a substantial improvement in the competitive dynamic by introducing sustainable competition between very different institutions.⁵²

51. François Bar et al., *Defending the Internet Revolution in the Broadband Era: When Doing Nothing is Doing Harm* (1999), *at* http://e-conomy.berkeley.edu/publications/ wp/ewp12.pdf [hereinafter *Bar*].

Experimentation by users and competition among providers, across the range of segments that constitute the Internet, generated a surge of self-sustaining innovation.... This network openness and the user-driven innovation it encouraged were a distinct departure from the prevailing supply-centric, provider-dominated, traditional network model. In that traditional model a dominant carrier or broadcaster offered a limited menu of service options to subscribers; experimentation was limited to small-scale trials with the options circumscribed and dictated by the supplier.

Diversity of experimentation and competition on an increasingly open network were key, since nobody could foresee what would eventually emerge as successful applications. Openness allowed many paths to be explored, not only those which phone companies, the infrastructure's monopoly owners, would have favored. Absent policy-mandated openness, the Regional Bell Operating Companies (RBOCs) and monopoly franchise [cable television] networks would certainly have explored only the paths of direct benefit to them. It is doubtful that without such policy-mandated openness the Internet Revolution would have occurred.

Id. at 8-9.

52. Benkler, Toward a Common Core Infrastructure, supra note 8, at 41.

A non-proprietary core common infrastructure threatens the business models of those companies that relied on the exclusivity of private commercial provisioning. While on its face the problem the core common infrastructure presents is of competition from a competitor that is insensitive to the bottom line, in fact something more fundamental is at stake. The main problem for private providers of physical infrastructure, like AOL-Time Warner or AT&T, is the introduction of meaningful choice of an infrastructure that is not biased in favor of one provider or another, but is truly free. The addition of a single alternative provider of commodified infrastructure or resources would weaken incumbent's market power, but not fundamentally alter the choice set of users. The addition of noncommodified, open infrastructure would destabilize the supposed inevitability of the incumbents' way of serving communications needs.

^{50.} See Langlois, supra note 14, at 207. Langlois offers a general proposition of system products:

[[]I]nnovation normally proceeds fastest when a large number of distinct participants are trying multiple approaches simultaneously. Because of the complexity that system products normally exhibit, and because of the qualitative uncertainty inherent in the process of innovation, multiple approaches and numerous participants provide greater genetic variety than would a single innovator (or small number of innovators), which leads to more rapid trial-and-error learning.

Id. (citations omitted).

In some geographic and product areas, this form of cooperative organization has expanded in the late industrial age.⁵³ By developing relationships between consumers or producers these entities have addressed specific needs for specific subsets of consumers and producers-all within the context of an industrial society – and utilized factors of production in new ways to their advantage.⁵⁴ The benefits of institutional diversity have long been noted in the cooperative sector. ⁵⁵ These include observations that institutions of different types provide yardstick competition that adds another dimension to competitive forces in the economy. Diversity of institutional types has long been one objective of non-profit institutions.⁵⁶

Thus, the revolution in communications and computing technology combined with the institutional innovation of the Internet to effect a potentially profound change in the environment in which information is produced and distributed. It opened the door to greater competition among a much wider set of producers and a more diverse set of institutions.

B. Open Communications Platforms Promote Civic Discourse

No discussion of communications platforms can be complete without specifying the impact of communications policy alternatives on political discourse. The configuration of political institutions that results from decisions about communications platforms is at least as important as the configuration of economic institutions.

^{53.} NONPROFIT ORGANIZATIONS IN THE MIXED ECONOMY 28 (Avner Ben-Ner & Benedetto Gui eds., 1996); Paul J. DiMaggio & Helmut K. Anheier, *The Sociology of Nonprofit Organizations and Sectors*, 16 ANN. REV. SOC., 137, 138 (1990).

^{54.} Peter Normark, *A Role for Cooperatives in the Market Economy*, ANNALS OF PUB. & COOPERATIVE ECON. 429, 430 (1996).

Several factors support the growth of the cooperative form of organization in a more knowledge- or service-oriented society. One factor is the increasing importance of human capital in the development of new businesses, whereas previously financial capital was dominant during the industrial epoch. Since the cooperative form of organization has its comparative advantages in its orientation towards the human capital and its disadvantages in relation to financial capital, the future for cooperatives seems promising.

Id.

^{55.} *Id.* at 430; TO PROFIT OR NOT TO PROFIT 69 (Bruce A. Weisbrod ed., 1998). At the same time that nonprofits are under going attack they are being increasingly relied upon to respond to changing economic and social conditions. There is increasing demand for trustworthy institutions as a geographically mobile population and an array of increasingly complex goods pose problems for consumers who seek assurance that they expect.

^{56.} See Lee Clarke & Carroll L. Estes, Sociological and Economic Theories of Markets and Nonprofits: Evidence from Home Health Organizations, 97 AM. J. SOC. 945, 948 (1992).

The relevance of information's economic characteristics has deep roots in the American political economy. Thomas Jefferson's belief "[t]hat ideas should freely spread from one to another over the globe, for the moral and mutual instruction of man, and improvement of his condition,"⁵⁷and the desire of the framers of the Constitution to have ideas circulate with relative ease⁵⁸ have become a rallying point for advocates of open communications platforms.

The spillover of the procompetitive and inclusionary elements of the revolution in the information environment for the democratic ideals of the polity is obvious. An active, informed citizenry has always been of special concern in America because an informed citizenry is the lifeblood of democracy, as Justice Brandeis explained in his concurrence in *Whitney v. California*,

Jefferson Letter, at 333-34.

58. LESSIG, *CODE*, *supra* note 2, at 130-35.

^{57.} See James Boyle, The Second Enclosure Movement and the Construction of the Public Domain, Conference on the Public Domain, Duke University School of Law, November 9-11, 2001, at http://www.law.duke.edu/pd/papers/boyle.pdf (citing Letter from Thomas Jefferson to Isaac McPherson (Aug. 13, 1813), in The Writings of Thomas Jefferson 326, 333-34 (Albert Ellery Bergh ed., 1907) [hereinafter Jefferson Letter]) (urging that Jefferson's comment should only be quoted in context to fully convey Jefferson's message as "a skeptical recognition that intellectual property rights might be necessary, a careful explanation that they should not be treated as natural rights, together with a warning of the monopolistic dangers that they pose.")

If nature has made anyone thing less susceptible than all others of exclusive property, it is the action of the thinking power called an idea, which an individual may exclusively possess as he keeps it to himself; but the moment it is divulged, it forces itself into the possession of every one, and the receiver cannot dispossess himself of it. Its peculiar character, too, is that no one possesses the less, because every other possesses the whole of it. He who receives an idea from me, receives instruction himself without lessening mine; as he who lights his taper at mine, receives light without darkening me. That ideas should freely spread from one to another over the globe, for the moral and mutual instruction of man, and improvement of his condition, seems to have been particularly and benevolently designed by nature, when she made them, like fire, expansible over all space, without lessening their density in any point, and like the air in which we breathe, move, and have our physical being, incapable of confinement or exclusive appropriation. Inventions then cannot in nature, be a subject of property.

Society may give an exclusive right to the profits arising from [inventions] as an encouragement to men to pursue ideas which [sic]may produce utility, but this may or may not be done, according to the will and convenience of the society, without claim or complaint from any body. Accordingly, it is a fact, as far as I am informed, that England was, until we copied her, the only country on earth which ever, by a general law, gave a legal right to the exclusive use of an idea. In some other countries it is sometimes done, in a great case, and by a special and personal act, but, generally speaking, other nations have thought that these monopolies produce more embarrassment than advantage to society; and it may be observed that the nations which [sic] refuse monopolies of invention, are as fruitful as England in new and useful devices.

Those who won our independence believed that the final end of the State was to make men free to develop their faculties; . . . that the greatest menace to freedom is an inert people; that public discussion is a political duty; and that this should be a fundamental principle of the American government. ⁵⁹

The ability of the Internet to transform consumers into producers of information is a potentially dramatic improvement in the involvement of the citizenry in civic discourse.

Of course, there are those who reject the notion that communications platforms can or should be viewed in anything but a purely economic light.⁶⁰ Mark Fowler, the first Chairman of the Federal Communications Commission in the Reagan administration, declared that television, the dominant mass media of the time, "is just another appliance... a toaster with pictures."⁶¹ In other words, there is a tendency to reduce communications to commodities and simple economics, forgetting the importance of information and media to civic discourse. If speech were just an economic commodity as these commentators suggest, we would not have needed the First Amendment. Fortunately, neither the U. S. Constitution, the Supreme Court, nor Congress accepted that view.

In order to appreciate why communications cannot be treated as a pure commodity we must review the role of information in the political process. This discussion starts from the First Amendment role of the press. It then points out how powerful the Internet could be in realizing First Amendment rights. It concludes by underscoring the importance of achieving this order of magnitude improvement in civic discourse in a highly complex and interconnected information society.

1. Civic Discourse

In 1945, Justice Black rendered the Supreme Court's opinion in *Associated Press v. United States,* which has set the tone for open civic discourse in the past half century, declaring that "[the First] Amendment rests on the assumption that the widest possible dissemination of information from diverse and antagonistic sources is essential to the welfare of the public."⁶² Justice Frankfurter, concurring in *Associated Press*, rejected the claim that the means of communications are just "a

^{59.} Whitney v. California, 274 U.S. 357, 375 (1927).

^{60.} See Weiser, supra note 5, at 22 (mentioning the obligations of the FCC to consider other values, but devoting no attention to the analysis).

^{61.} BAKER, *supra* note 6, at 3 (citing Caroline E. Mayer, *FCC Chiefs Fears: Fowler Sees Threat in Regulation*, WASH. POST, Feb. 6, 1983, at K6.).

^{62.} Assoc. Press v. United States, 326 U.S. 1, 20 (1945).

toaster with pictures," although he used different commodities as his point of reference.

A free press is indispensable to the workings of our democratic society. The business of the press, and therefore the business of the Associated Press, is the promotion of truth regarding public matter by furnishing the basis for an understanding of them. Truth and understanding are not wares like peanuts and potatoes. And so, the incidence of restraints upon the promotion of truth through denial of access to the basis for understanding calls into play considerations very different from comparable restraints in a cooperative enterprise having merely a commercial aspect.⁶³

Since the Associated Press decision, the Supreme Court has reaffirmed this view with respect to newspapers⁶⁴ and has unflinchingly applied it to all forms of mass media including broadcast TV^{65} and cable $TV.^{66}$ In the panoply of media jurisprudence, the Internet "has the potential to make the First Amendment's freedom of the press just as much an individual right as have long understood freedom of speech to be."⁶⁷ Lessig points out that at the time of the framing of the Constitution the press had a very atomistic trait.

The "press" in 1791 was not the *New York Times* or the *Wall Street Journal*. It did not comprise large organization of private interests, with millions of readers associated with each organization. Rather, the press then was much like the Internet today. The cost of a printing press was low, the readership was slight, and anyone (within reason) could become a publisher – and in fact an extraordinary number did. When the Constitution speaks of the rights of the "press," the architecture it has in mind is the architecture of the Internet.⁶⁸

In dealing with the print media, the Supreme Court adopted the view that private market power should not be allowed to infringe on civic discourse when it opined:

Surely a command that the government itself shall not impede the free flow of ideas does not afford non-governmental combinations a refuge if they impose restraints upon that constitutionally guaranteed

^{63.} Id. at 28.

^{64.} See generally FCC v. Nat'l Citizens Comm. for Broad., 436 U.S. 775 (1978).

^{65.} See generally Red Lion Broad. v. FCC, 395 US 367 (1969).

^{66.} Turner Broad. Sys., Inc. v. FCC, 512 U.S. 622, 638-39 (1994) (*Turner I*); Time Warner Entm't Co. v. FCC, 240 F.3d 1126 (D.C. Cir. 2001) (*Time Warner III*.)

^{67.} MARK GODWIN, CYBER RIGHTS 286 (1998).

^{68.} LESSIG, CODE, at 183 (citations omitted).

freedom. Freedom to publish means freedom for all and not for some. Freedom to publish is guaranteed by the Constitution, but freedom to combine to keep others from publishing is not. Freedom of the press from governmental interference under the First Amendment does not sanction repression of that freedom by private interests.⁶⁹

Liberal economists recognize that there are political reasons to prefer atomistically competitive markets.⁷⁰ The most prominent among them recognize that the analysis should begin with the political implications of economic institutions.⁷¹ They identify a number of characteristics of competitive markets that also support the democratic aspirations of the polity.

Atomistic competition decentralizes and disperses power. It relies on objective processes.⁷² Autonomy and freedom of entry are two other economic characteristics of atomistically competitive markets that converge with democratic principles. Atomistic competition tends to promote individualistic, impersonal decisions by its relatively low resource requirements for entry. There is a close symmetry between the end-to-end principle and the fundamental institutional principles of our democracy. This observation applies with particular force to communications platforms.⁷³

Id.

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^{69.} Assoc. Press., 326 U.S. at 20.

^{70.} SCHERER & ROSS, *supra* note 1, at 18.

^{71.} Id.

We begin with the political arguments, not merely because they are sufficiently transparent to be treated briefly, but also because when all is said and done, they, and not the economists' abstruse models, have tipped the balance of social consensus toward competition. One of the most important arguments is that the atomistic structure of buyers and sellers required for competition decentralizes and disperses power. The resource allocation and income distribution problem is solved through the almost mechanical interaction of supply and demand forces on the market, and not through the conscious exercise of power held in private hands (for example, under monopoly) or government hands (that is, under state enterprise or government regulation). Limiting the power of both government bodies and private individuals to make decisions that shape people's lives and fortunes was a fundamental goal of the men who wrote the U.S. Constitution.

^{72.} Id. at 19. A closely related benef

A closely related benefit is the fact that competitive market processes solve the economic problem *impersonally*, and not through the personal control of entrepreneurs and bureaucrats...

[[]Another] political merit of a competitive market is its freedom of opportunity. When the no-barriers-to-entry condition of perfect competition is satisfied, individuals are free to choose whatever trade or profession they prefer, limited only by their own talent and skill and by their ability to raise the (presumably modest) amount of capital required.

^{73.} LESSIG, *CODE*, *supra* note 2, at 166-67 (citations omitted).

The Associated Press decision expressed a concern about the sheer size of news organizations and the undue influence that could result.⁷⁴ In the industrial age the size of media organizations presents a growing mismatch between those who control media organizations and average citizens.⁷⁵ Horizontal market power detracts from civic discourse.⁷⁶ As discussed below, vertical market power, which is an increasing concern in the economy, is also a concern in the polity.⁷⁷

Institutional diversity—different media business models, with different cultural and journalistic traditions—plays a special role in promoting civic discourse. Unique perspectives provided by different institutions should be highly valued as sources of information. Judge Learned Hand painted a picture of diversity that was properly complex, noting that a newspaper "serves one of the most vital of all general interests: the dissemination of news from as many different sources, and with as many different facets and colors as is possible."⁷⁸ Moreover, the unique perspective of different media types is important to present a multidimensional perspective—in terms of intensity and point of view.⁷⁹

Id.

74. Maurice E. Stucke & Allen P. Grunes, *Antitrust and the Marketplace of Ideas*, 69 ANTITRUST L.J. 249, 262-63 (2001).

Nor did the majority of justices jump through the typical hoops of defining a relevant market, determining market share and the restraints' impact on price and examining issue of entry or expansion by the other news wire services. Rather the majority was satisfied that AP was sufficiently large to impact the marketplace of ideas, in that it was "a vast, intricately reticulated, organization, the largest of its kind, gathering news from all over the world, the chief single source of news for the American press, universally agreed to be of prime consequence."

Relative anonymity, decentralized distribution, multiple points of access, no necessary tie to geography, no simple system to identify content, tools of encryption – all these features and consequences of the Internet protocol make it difficult to control speech in cyberspace. The architecture of cyberspace is the real protector of speech there; it is the real "First Amendment in cyberspace," and this First Amendment is no local ordinance. . .

The architecture of the Internet, as it is right now, is perhaps the most important model of free speech since the founding. This model has implications far beyond e-mail and web pages.

Id.

^{75.} Lawrence Anthony Sullivan, *Economics and More Humanistics Disciplines: What are the Sources of Wisdom for Antitrust*, 125 U. PA. L. REV. 1214, 1223 (1977) ("Americans continue to value institutions the scale and workings of which they can comprehend. Many continue to value the decentralization of decision making power and responsibility. Many favor structures in which power in one locus may be checked by power in another.")

^{76.} See MARK COOPER, CABLE MERGERS AND MONOPOLIES: MARKET POWER IN DIGITAL MEDIA AND COMMUNICATIONS NETWORKS (2002) [hereinafter COOPER, CABLE MERGERS]

^{77.} See infra Part IV(B)(2).

^{78.} United States v. Assoc. Press, 52 F.Supp. 362, 372 (D.C.N.Y. 1943), *affd* 326 U.S. 1 (1945).

^{79.} Stucke & Grunes, *supra* note 74, at 282-83.

Thus, the unique characteristics of the Internet and the open communications platforms that support it create more competitive forms of information production, but they also promote more open and democratic discourse.

2. Expanding Needs, Promising Capabilities

There is no such thing as "enough" democratic discourse. As the means of communications have changed over the course of the twentieth century, from print to radio, to broadcast television, to multichannel cable and satellite TV, Congress and the Supreme Court have renewed their commitment to diversity and richer civic discourse. At each stage of development, public policy has required that each new means of communication promote diversity to preserve a variety of different kinds of media institutions. Differing business models and journalistic cultures promote public debate. Had the Supreme Court originally not adopted an open-ended goal, it would have been all too easy to declare a single victory in the struggle to deepen and defend civic discourse and stop there—but our democracy would be much poorer as a result.

As the world becomes a more complex place, the need for diverse sources of information becomes more important.⁸⁰ Mobility, social fragmentation, and globalization of the economy have placed a greater pressure on communications networks to enable citizens to be informed about increasingly complex issues. The power of digital communication will be greatly enhanced by improved video images, and the impact heightened by real-time interactivity and personalized ubiquity.⁸¹ But,

[[]I]t is problematic, or as Judge Learned Hand asserted "impossible," to treat different news services as "interchangeable".... A newspaper reflects the biases and views of its writers, editors, and perhaps owners. One newspaper may downplay and truncate a news wire story, while the other newspaper may carry it as a headline. These are not fungible commodities. Thus, the marketplace is not about consumers switching from one homogenous product to another. Rather, it is the net increase in consumer welfare from having many competing news sources and editorial voices. As Judge Hand aptly stated about the marketplace of ideas – and it bears repeating – "it is only by cross-lights from varying directions that full illumination can be secured." Unlike restraints on ordinary commodities (where consumers may turn to less-desirable alternatives but the overall societal impact is not significant), for restraints in the media, the alternatives may be inherently unsatisfactory and the costs imposed on society may be significant.

Id. (citations omitted).

^{80.} JEREMY RIFKIN, THE AGE OF ACCESS: THE NEW CULTURE OF HYPERCAPITALISM, WHERE ALL LIFE IS A PAID-FOR EXPERIENCE, Chs. 11 and 12 (2000); SHAPIRO, *supra* note 28, at Chs. 20 & 21.

^{81.} See SHAPIRO & VARIAN, supra note 16, at 7. "The Net allows information vendors to move from the conventional broadcast form of advertising to one-to-one marketing. ... The information amassed by these powerful Web servers is not limited to their users' current

these dramatic increases in the ability to control media messages may result in a greater ability to manipulate and mislead, rather than to educate and enlist citizens in a more intelligent debate.⁸² Thus, while it is true that there is a great deal more information available to more educated citizens today than fifty years ago, it is also true that they need more information and better ways to participate in civic discourse. The same changes in the information environment that have made the development of more complex and rapid communications possible, also make it more difficult for citizens to comprehend and respond effectively to new conditions.

Fortunately, if allowed, the new form of information production will support deeper forms of democratic expression. This is a longstanding aspiration, as Baker describes in his discussion of complex democracy, which "seeks a political process that promotes both fair partisan bargaining and discourses aimed at agreement."83 It is the participatory nature of discourse that allows citizens to reach agreement and sustain disagreement. "Agreement on a common good, however, is really only acceptable from the perspective of each group's own needs, projects and commitments."84 This autonomy arises through "selfreflective and self-defining activities [that] also points to the crucial role of media forms, such as fiction, art, and dance that are largely ignored in the democratic vision of the elitist or pluralist."85

Benkler articulates a political goal, mirroring his economic goal, which embodies a convergence of the economic and political aspirations of society in this new information environment. "Technology now makes possible the attainment of decentralization and democratization by enabling small groups of constituents and individuals to become usersparticipants in the production of their information environment – rather than by lightly regulating concentrated commercial mass media to make them better serve individuals conceived as passive consumers."86

Benkler calls for policies to ensure that this new form of organization thrives.⁸⁷ In doing so, he seeks to protect the opportunity for a more meaningful form of democratic participation, and the increased diversity of institutions that flow from this structure.⁸⁸ Lessig

behavior; they can also access vast databases of information about customer history and demographics."

SHAPIRO, *supra* note 28, at 118-20.
 BAKER, *supra* note 6, at 149.

^{84.} Id. at 149-50.

^{85.} Id. at 150.

^{86.} Benkler, Consumers to Users, supra note 7, at 562.

^{87.} See Benkler, Toward a Core Common Infrastructure, supra note 8, at 1.

^{88.} Id. at 3.

The freedom for all users to participate in building our information and cultural environment is the greatest promise of networked communications. It is a freedom

too points out that technology can shift the balance between freedom and control of expression.⁸⁹ The point of policy is to direct this equation in order to support greater innovation and liberty. The key is to preserve a balance that allows diverse civic discourse.⁹⁰

Because our communications methods are far more than "toasters with pictures," civic discourse becomes constrained when the communications platform is closed. More importantly, the potential to enrich civic discourse in the Internet age would be lost.⁹¹

C. The Role of Public Policy In Creating Open Communications Platforms

As the previous sections suggest, the key governmental role of requiring an open system at a fundamental level gave rise to a powerful

Id.

89. LESSIG, *CODE*, *supra* note 2, at 43-60.

90. LESSIG, THE FUTURE OF IDEAS, supra note 13, at 138-39.

The innovations that I have described flow from the environment the Net is. The environment is a mix of control and freedom. It is sensitive to changes in that mix. If the constraints on the content layer are increased, innovation that depends upon free content will be restricted. If the access guaranteed by a commons at the code layer becomes conditioned or restricted, then innovation that depends upon this access will be threatened. The environment balances the free against the controlled. Thus, preserving this environment means preserving this balance.

Id.

91. Benkler, Institutional Ecosystem, supra note 12, at 88.

Liberal democracies developed their prevailing answers to the question of how shall individuals be free, productive, and live in a just society when the core resources and outputs in their economics (such as coal, ore, and grains) were scarce traditional economic goods, costly to produce and distribute. They found that organizing production under these conditions requires boxing freedom into the categories of "public-political" and "private-personal," keeping both to a greatest extent out of the productive realm. We discovered that too much focus on equality could lead to a serious decline in productivity, to the serious compromise of freedom, or both. But these answers no longer have the same purchase when the most valuable inputs and outputs of our society – information, knowledge, culture, and human creativity – are either public goods in the strict economic sense or uniquely personal to creative, nonfungible individuals.

The point is that simply copying the settlement from the economy of stuff to the economy of information is unnecessary. In that portion of our lives increasingly occupied by information, we can be free in a richer sense and more egalitarian in the distribution of wealth while maintaining or increasing productivity.

tied directly to the core values of democracy and autonomy that underlie the American commitment to freedom of speech and a free press. To secure this freedom, however, we must build a core common infrastructure that will allow commercial and noncommercial, professional and amateur, commodified and noncommodified, mainstream and fringe to interact in an environment that allows all to flourish and is biased in favor of none.

wave of innovation. There must be no mistake about the critical role that government policy played in the process of creating this new information environment.

Leaving aside the origin of the Internet in national security concerns,⁹² a determined commitment by the government to open communications networks was critical to the widespread development of the Internet. It is clear that the communications platform of the Internet was founded on, and thrived on, the principle that facility owners in the physical layer could not discriminate against innovators or speakers.⁹³ The FCC required access to the telecommunications network at rates based on cost and terms and conditions that allowed experimentation and user choice.⁹⁴ At the same time, the FCC refused to regulate the service offered.⁹⁵

Thanks to the FCC policy of "openness" and competition, specialized networks and their users could unleash the Internet revolution. This assured the widest possible user choice and the greatest opportunities for users to interact with the myriad of emerging new entrants in all segments of the network. To be sure, the FCC strategy emerged haltingly but itfollowd a rather consistent direction. . . The Commission supported competition and innovation by keeping the critical network infrastructure open to new architectures and available to new services on cost effective terms. The instruments of FCC policy were to make leased lines (and, lately, network functions) available on cost-oriented terms and to forebear from regulating Internet and other data services. It set in motion a virtuous cycle of cumulative innovation, new services, infrastructure development, and increased network usage with evident economic benefits for the U.S. economy.

Id.

94. Lemley & Lessig, *The End of End-to-End*, *supra* note 26, at 936.

We certainly do not claim that a communications network would have been impossible without the government's intervention. We have had telecommunication networks for over a hundred years, and as computers matured, we no doubt would have had more sophisticated networks. The design of those networks would not have been the design of the Internet, however. The design would have been more like the French analogue to the Internet—Minitel. But Minitel is not the Internet. It is a centralized, controlled version of the Internet, and it is notably less successful.

Id.

95. NorthNet, Inc., An Open Access Business Model For Cable Systems: Promoting Competition & Preserving Internet Innovation On A Shared, Broadband Communications Network, Ex Parte, *Application of America Online Inc. & Time Warner, Inc. for Transfers of Control*, F.C.C., CS-Docket No. 0030, October 16, 2000 [hereinafter *NorthNet*] (on file with author); *see also* Earl W. Comstock & John W. Butler, Access Denied: The FCC's

^{92.} JANET ABBATE, INVENTING THE INTERNET, Chs. 1 & 2 (1999).

^{93.} Bar, supra note 51.

The FCC allowed specialized providers of data services, including Internet Service Providers (ISPs), and their customers access to raw network transmission capacity (through leased lines) on cost-effective terms. First, regulatory policy forced open access to networks where the monopoly owners would try to keep things closed. Second, the resulting competition allowed the FCC to free the service providers from detailed regulation that would have kept them from using the full capabilities of the network in the most open and free manner.

Lessig states the political issue in extremely charged terms, drawing an analogy between open communications platforms and freedom:

We are remaking the values of the Net, and the question is: Can we commit ourselves to neutrality in this reconstruction of the architecture of the Net?

I don't think that we can. Or should. Or will. We can no more stand neutral on the question of whether the Net should enable centralized control of speech than Americans could stand neutral on the question of slavery in 1861.⁹⁶

The rich information environment that evolved on the Internet is a positive externality of both technological development and public policy. The threat to this rich environment is precisely the threat that private actors and actions will not take these positive externalities into account, and thus will destroy the environment.⁹⁷

This section has argued that the policy of promoting an open communications platform interacted with technological developments to create a dramatic improvement in the production and distribution of information. These were beneficial to the economy and civic discourse. They are now threatened by a movement among facilities owners to close the communications platform.

IV. THE CASE AGAINST CLOSED COMMUNICATIONS PLATFORMS

Active government policy to promote open communications platforms provided a basis for the fundamental improvement in competitive dynamics and robust civic discourse in our economy. But

Failure to Implement Open Access to Cable as Required by the Communications Act, COMMLAW CONSPECTUS, at 5 (Winter 2000).

^{96.} LESSIG, CODE, supra note 2, at 205 (citation omitted).

^{97.} See JOHN B. TAYLOR, ECONOMICS 420 (1995).

A direct analogy to biodiversity in the physical environment is appropriate. Taylor offers the following discussion of positive externalities from biodiversity and the threats of private actions, particularly the intergenerational threat: Biodiversity – the rich variety of plant and animal life in the world – has been recognized as having important benefits for pharmaceutical and medical research. Ideas for many important pharmaceutical products throughout history...have been discovered in the natural environment and then modified or improved by researchers...

Id.

Those governments or individuals who own the rain forests suffer little if any cost from cutting them down and losing the biodiversity. The cost is external to them, spread around the world and indeed, to future generations, who must forego the opportunity of better drugs or other benefits that the variety of plant an animal life might bring.

facility owners are constantly pressing regulators and legislators to abandon the principal of an open communications platform.

This Section offers a theoretical response to the economic claim that closed platforms are more efficient by weaving together post-Chicago thinking about the exercise of market power and the developing body of theoretical literature on the economic properties of the Internet.

A. Questioning The Theory Of Monopoly As A Superior Source Of Value Creation

1. Incentives to Invest

As the FCC put it, "[s]ome economists, most notably Schumpeter, suggest that monopoly can be more conducive to innovation than competition, since monopolists can more readily capture the benefits of innovation."⁹⁸ Thus, some argue that facility owners, exercising their property rights to exclude and dictate uses of the network, will produce a more dynamic environment than an open communications platform.⁹⁹ The hope is that a very small number of owners engaging in the rent seeking behavior of innovators will stimulate more investment, and that this enlightened self-interest will probably convince them to open their network.¹⁰⁰ Notwithstanding the clear success of the open

Id. (citations omitted).

^{98.} Implementation of Section 11 of the Cable Television Consumer Protection and Competition Act of 1992, *Further Notice of Proposed Rulemaking*, 16 F.C.C.R. 17,312, ¶ 36 (2001) (citation omitted). *See also* 47 C.F.R. §§ 21, 73 & 76 (2001).

^{99.} See Weiser, supra note 5 (stating "in markets where more than one network standard battle it out in the marketplace, users can benefit from a greater degree of dynamism.").
100. See Lemley & Lessig, The End of End-to-End, supra note 26, at 957-59.

The only argument we have been able to find suggesting that eliminating ISP competition might actually be desirable is that eliminating competition gives cable companies supercompetitive revenues that in turn will encourage them to deploy broadband Internet access more quickly.... Cable companies will deploy broadband access and open it to competition, but only if they are "able to charge unaffiliated ISPs and other content providers the full monopoly price for interconnection and access." ... [The author] assumes that no one will buy broadband cable services initially unless the cable company itself provides high-bandwidth content. And the cable companies will have no incentive to invest in developing broadband infrastructure unless they can reap monopoly profits from that endeavor.... In effect, the argument is that we must expand the cable companies' monopoly over the wires into competitive markets in order to give them an incentive to implement broadband access.

The need for investment incentives is a fair point. But it is worth noting at the outset that this "monopoly incentives" argument contradicts every other argument made by opponents of ISP competition. For cable companies to reap monopoly returns from prices charged to ISPs means, among other things, that the cable companies will not voluntarily open their lines to ISP competition. If cable

communications platform,¹⁰¹ and the demonstrated unwillingness of incumbent facility owners to open their platforms when they are not required to do so,102 monopoly proponents tell us that the next generation of the Internet cannot succeed under the same rules of open communications that were responsible for its birth.

This argument is conceptually linked to long-standing claims that "firms need protection from competition before they will bear the risks and costs of invention and innovation, and a monopoly affords an ideal platform for shooting at the rapidly and jerkily moving targets of new technology."¹⁰³ Lately this argument is extended to claims that, in the new economy, "winner take all" industries exhibit competition for the entire market, not competition within the market. As long as monopolists are booted out on a regular basis, or believe they can be, monopoly is in the public interest.¹⁰⁴

In a sense, this argument is a return to the pre-Internet logic of communications platforms, in which it is assumed that the center of value creation resides in the physical layer.¹⁰⁵

The contrast between the demonstrated impact of freeing the code and content layers to innovate and add value, while running on top of an open physical layer, could not be more dramatic.¹⁰⁶

103. SCHERER & ROSS, *supra* note 1, at 31.

105. Weiser, supra note 5, at 29.

ISPs cannot compete on the core value proposition in a broadband world unless they are offering a facilities-based service that enables them to compete on price and quality with a cable provider of Internet service. To the extent that a cable provider desires to find new marketing channels, it may well strike arrangements with ISPs to assist on that score, but the ISPs are not competing on the core product.

At best, the ISPs are able to offer differentiated content on the portal screen, added security features, more reliable privacy policies and the like.

companies are collecting monopoly profits from ISPs, it means that facilities-based competition by other forms of broadband Internet access has not served to restrict cable's power over price. It means that broadband cable service is a monopoly, and therefore within the jurisdiction of the antitrust laws. And it assumes that, contrary to the Chicago-school theory of tying, cable companies will make more money from bundling ISP service with the provision of access than they would merely by charging an unregulated price for access alone.

Id. (citations omitted).

^{101.} LESSIG, THE FUTURE OF IDEAS, supra note 13, Ch. 8 (2001).

^{102.} Id. at Ch. 10.

^{104.} See STAN J. LIEBOWITZ & STEPHEN E. MARGOLIS, WINNERS, LOSERS & MICROSOFT: COMPETITION AND ANTITRUST IN HIGH TECHNOLOGY (2001) (using the term 'serial monopoly', as do a bevy of other Microsoft supported experts); Mark Cooper, Antitrust as Consumer Protection in the New Economy: Lessons from the Microsoft Case, 52 HASTINGS LJ. 813 (2001) [hereinafter Cooper, Antitrust] (Pointing out that there is nothing serial in Microsoft's monopolies. Rather, Microsoft conquers market after market using leverage and anticompetitive tactics, never relinquishing any of its previous monopolies).

Id. (footnote omitted).

^{106.} Lemley & Lessig, The End of End-to-End, supra note 26, at 943-44.

The theory supporting Schumpeterian rents is particularly ill-suited to several layers of the Internet information platform. It breaks down if the monopoly is not transitory, a likely outcome in the physical layer. In the physical layer, with its high capital costs and other barriers to entry, monopoly is more likely to quickly lead to anticompetitive practices that leverage the monopoly power over bottleneck facilities into other layers of the platform.

The theory has also been challenged for circumstances that seem to typify the code and applications layers of the Internet platform. ¹⁰⁷ The monopoly rent argument appears to be least applicable to industries in which rapid and raucous technological progress is taking place within the framework of an open platform, as has typified the Internet through its first two decades.¹⁰⁸ The "winner take all" argument was firmly rejected

Id.

107. SCHERER & ROSS, *supra* note 1, at 660.

Viewed in their entirety, the theory and evidence [in support of monopoly power] suggest a threshold concept of the most favorable climate for rapid technological change. A bit of monopoly power in the form of structural concentration is conducive to innovation, particularly when advances in the relevant knowledge base occur slowly. But very high concentration has a positive effect only in rare cases, and more often it is apt to retard progress by restricting the number of independent sources of initiative and by dampening firms' incentive to gain market position through accelerated R&D. Likewise, given the important role that technically audacious newcomers play in making radical innovations, it seems important that barriers to new entry be kept at modest levels. Schumpeter was right in asserting that perfect competition has no title to being established as the model of dynamic efficiency. But his less cautious followers were wrong when they implied that powerful monopolies and tightly knit cartels had any strong claim to that title. What is needed for rapid technical progress is a subtle blend of competition and monopoly, with more emphasis in general on the former than the latter, and with the role of monopolistic elements diminishing when rich technological opportunities exist.

Id. (emphasis added).

108. Daniel L. Rubinfeld & John Hoven, *Innovation and Antitrust Enforcement, in* DYNAMIC COMPETITION AND PUBLIC POLICY: TECHNOLOGY, INNOVATION, AND ANTITRUST ISSUES 65, 75-76 (Jerry Ellig ed., 2001).

One policy implication for antitrust is the need to preserve a larger number of firms in industries where the best innovation strategy is unpredictable.... Another

One should not think of ISPs as providing a fixed and immutable set of services. Right now, ISPs typically provide customer support as well as an Internet protocol (IP) address that channels the customer's data. Competition among ISPs focuses on access speed and content.

^{...} The benefits of this competition in the Internet's history should not be underestimated. The ISP market has historically been extraordinarily competitive. This competition has driven providers to expand capacity and to lower prices. Also, it has driven providers to give highly effective customer support. This extraordinary build-out of capacity has not been encouraged through the promise of monopoly protection. Rather, the competitive market has provided a sufficient incentive, and the market has responded.

in the Microsoft case.¹⁰⁹ The Internet seems to fit the mode of atomistic competition much better than the monopoly rent model, as did the development and progress of its most important device, the PC.¹¹⁰

Current theoretical literature provides an ample basis for concerns that the physical layer of communications platforms will not perform efficiently or in a competitive manner without a check on market power. In this layer, barriers to entry are substantial, and go far beyond simple entrepreneurial skills that need to be rewarded.¹¹¹ At the structural level, new entry into these physical markets is difficult.

The dominant players in the physical layer have the power to readily distort the architecture of the platform to protect their market interests.¹¹² They have a variety of tools to create economic and entry barriers ¹¹³ such as exclusive deals,¹¹⁴ retaliation,¹¹⁵ manipulation of

110. See Langlois, supra note 14, at 215.

In the case of the personal computer, the rise of a single dominant – but largely open and nonproprietary – standard focused innovation in modular directions. [I]t is the ensuing rapid improvement in components, including not only the chips but various peripheral devices like hard disks and modems, as well as the proliferation of applications software, that has led to the rapid fall in the quality-adjusted price of the total personal computer system.

111. See Legal Rights Satellite Org., *Communications Convergence of Broadcasting and Telecommunications Services*, (arguing that there were barriers to entry into physical facilities) *at* http://www.legal-rights.org/Laws/convergence.html (last visited Jan. 17, 2003).

In the opinion of AT&T Canada LDS, the supply conditions in broadband access markets are extremely limited. There are significant barriers to entry in these markets including lengthy construction periods, high investment requirements and sunk costs, extensive licensing approval requirement (including the requirements to obtain municipal rights-of-way)... Under these circumstances, the ability for new entrants or existing facilities-based service providers to respond to non-transitory price increases would be significantly limited, not to mention severely protracted.

112. See id. See also Franklin M. Fisher, *Innovation and Monopoly Leveraging, in* DYNAMIC COMPETITION AND PUBLIC POLICY: TECHNOLOGY, INNOVATION, AND ANTITRUST ISSUES 138 (Jerry Ellig ed., 2001).

113. See Joseph Farrell & Garth Saloner, Installed Base and Compatibility: Innovation, Product Preannouncements, and Predation, 76 AM. ECON. REV. 940, 948-51 (1986); Michael L. Katz & Carl Shapiro, Product Introduction with Network Externalities, 40 J. INDUS. ECON. 55, 73 (1992); Richard Makadok, Can First-Mover and Early-Mover Advantages Be Sustained in an Industry with Low Barriers to Entry/Imitation?, 19 STRATEGIC MGMT. J. 683, 685-86 (1998); Ulrich Witt, "Lock-in" vs. "Critical Masses"– Industrial Change Under Network Externalities, 15 INT'L J. INDUS. ORG. 753, 768-69

implication is ... that "Technical progress thrives best in an environment that nurtures a diversity of sizes and, perhaps especially, that keeps barriers to entry by technologically innovative newcomers low."... A third implication is the awareness that dominant firms may have an incentive to act so as to deter innovative activities that threaten the dominant position...

Id. (citation omitted).

^{109.} See United States v. Microsoft, 253 F.3d 34, 103 (D.C. Cir. 2001) (per curiam); Cooper, Antitrust, supra note 104, at 815-25

Id. (citation omitted).

Id.

standards,¹¹⁶ and strategies that freeze customers.¹¹⁷ Firms can leverage their access to customers to reinforce their market dominance¹¹⁸ by creating ever-larger bundles of complementary assets.¹¹⁹ As the elasticity of demand declines over the course of the product life cycle, market power lodged in the physical layer results in excessive bundling¹²⁰ and overpricing of products under a variety of market conditions.¹²¹ Control over the product cycle can impose immense costs by creating incompatibilities,¹²² forcing upgrades,¹²³ and by spreading the cost increases across layers of the platform to extract consumer surplus.¹²⁴

In information markets, creating incompatibilities or blocking the flow of information undermines consumer value.¹²⁵ Because of the

118. See Makadok, supra note 113, at 685.

119. See David B. Yoffie, CHESS and Competing in the Age of Digital Convergence, in COMPETING IN THE AGE OF DIGITAL CONVERGENCE 1, 27 (David B. Yoffie ed., 1997); see also Robert E. Dansby & Cecilia Conrad, Commodity Bundling, 74 AM. ECON. REV. 377 (1984).

120. See Carmen Matutes & Pierre Regibeau, Compatibility and Bundling of Complementary Goods in a Duopoly, 40 J. INDUS. ECON. 37 (1992).

121. See id.; see also Joseph P. Guiltinan, The Price Bundling of Services: A Normative Framework, J. MKTG. April 1987, at 74; Lester Telser, A Theory of Monopoly of Complementary Goods, 52 J. BUS. 211 (1979); Richard Schmalensee, Gaussian Demand and Commodity Bundling, 57 J. BUS. 211 (1984).

122. See Jay Pil Choi, Network Externality, Compatibility Choice, and Planned Obsolescence, 42 J. INDUS. ECON. 167, 171-73 (1994).

123. See Glenn Ellison & Drew Fudenberg, The Neo-Luddite's Lament: Excessive Upgrades in the Software Industry, 31 RAND J. ECON. 253 (2000); Drew Fudenberg & Jean Tirole, Upgrades, Trade-ins, and Buybacks, 29 RAND J. ECON. 235, 235-36 (1998).

124. See id. at 176-77; K. Sridhar Moorthy, Market Segmentation, Self Selection, and Product Lines Design, 3 MKTG. SCI. 256 (1985); Marcel Thum, Network Externalities, Technological Progress, and the Competition of Market Contract, 12 INT. J. INDUS. ORG. 269 (1994).

125. See Langlois, supra note 14, at 52 ("The owner of a dominant standard may thus want to manipulate the standard in ways that close off the possibilities for a competitor to achieve compatibility. This has a tendency to retard the generational advance of the system.").

^{(1997);} Robin Mansell, Strategies for Maintaining Market Power in the Face of Rapidly Changing Technologies, 31 J. ECON. ISSUES 969, 970 (1997).

^{114.} See Melissa A. Schilling, Technological Lockout: An Integrative Model of the Economic and Strategic Factors Driving Technology Success and Failure, 23 ACAD. MGMT. REV. 267, 276 (1998).

^{115.} See Willow A. Sheremata, "New" Issues in Competition Policy Raised by Information Technology Industries, 43 ANTITRUST BULL. 547, 573-74 (1998); Glenn A. Woroch et al., Exclusionary Behavior in the Market for Operating System Software: The Case of Microsoft, in OPENING NETWORKS TO COMPETITION: THE REGULATION AND PRICING OF ACCESS 221 (David Gabel & David F. Weiman eds., 1998).

^{116.} See Sheremata, supra note 115, at 560-61; see also CHARLES H. FERGUSON, HIGH ST@KES, NO PRISONERS: A WINNER'S TALE OF GREED AND GLORY IN THE INTERNET WARS 307 (1999); Mark A. Lemley & David McGowan, Could Java Change Everything? The Competitive Propriety of a Proprietary Standard, 43 ANTITRUST BULL. 715, 732-33 (1998).

^{117.} See Joseph Farrell & Michael L. Katz, *The Effects of Antitrust and Intellectual Property Law on Compatibility and Innovation*, 43 ANTITRUST BULL. 609, 643-50, (1998); Sheremata, *supra* note 115, at 547, 573-74.

interconnected nature of the information platform and the decentralized nature of participation, practices that restrict flows undermine a broader range of activities and harm a wider set of actors.

Claims that monopoly rents cannot be increased by conquering neighboring markets have been refuted by recent analyses that indicate there is ample evidence that these anti-competitive behaviors may be attractive to a new economy monopolist for static and dynamic reasons.126 Market power in a core product can be preserved by conquering neighboring markets, erecting cross-platform incompatibilities, raising rivals' costs, or preventing rivals from achieving economies of scale. Profits in the core product may also be increased by taking advantage of the ability to price discriminate. By driving competitors out of neighboring markets, new monopolies may be created or the ability to preserve market power across generations of a product may be enhanced by diminishing the pool of potential competitors.

3. The Negative Externalities of a Closed Communications Platform

Even without intentional anticompetitive behavior, closure of the communications platform imposes a cost in two ways, by distorting incentives for innovation and by undermining institutional options for the production of information. First, restricting the range of experimentation and shifting incentives reduces the quality and quantity of innovation and innovators because it shifts the balance between incumbents and disruptive entrants. The hand of incumbents, who shy away from disruptive innovation, would be strengthened.¹²⁷ Incumbents behave rationally by developing their core competence and then by

127. See LESSIG, CODE, supra note 2, at 91.

^{126.} See id., at 19-24; see also Michael Katz & Carl Shapiro, Antitrust and Software Markets, in COMPETITION, INNOVATION AND THE MICROSOFT MONOPOLY: ANTITRUST AND THE DIGITAL MARKETPLACE, 70-80 (Jeffrey A. Eisenach & Thomas M. Lenard eds., 1999); Lansuz A. Ordover & Robert D. Willig, Access and Bundling in High Technology Markets, in COMPETITION, INNOVATION AND THE MICROSOFT MONOPOLY: ANTITRUST AND THE DIGITAL MARKETPLACE (Jeffrey A. Eisenach & Thomas M. Lenard eds., 1999); Steven C. Salop, Using Leverage to Preserve Monopoly, in COMPETITION, INNOVATION AND THE MICROSOFT MONOPOLY: ANTITRUST AND THE DIGITAL MARKETPLACE (Jeffrey A. Eisenach & Thomas M. Lenard eds., 1999).

But we can see in the Internet a strategy for dealing with the very same blindness. . . If the platform remains neutral, then the rational company may continue to eke out profit from the path it has chosen, but the competitor will always have the opportunity to use the platform to bet on a radically different business model.

This again is the core insight about the importance of end-to-end. It is a reason why concentrating control will not produce disruptive technology. Not necessarily because of evil monopolies, or bad management, but rather because good business is focused on improving its lot, and disruptive technologists have no lot to improve.

seeking structures that reward it.¹²⁸ The incentives for innovators are also dampened.¹²⁹ Second, Benkler's economic analysis predicts that dominant commercial mass media firms have incentives to expand by commercializing, concentrating, and homogenizing information space. As a result,

[n]oncommercial producers will systematically shift to commercial strategies. Small-scale producers will systematically be bought up by large-scale organizations that integrate inventory management with new production. Inventory owners will systematically misallocate human creativity to reworking owned-inventory rather than to utilizing the best information inputs available to produce the best new information product.¹³⁰

Potential sources of disruptive innovation would shrink.¹³¹ Physical layer owners control access to the network to protect their franchise,

129. Id. at 932, 946.

Innovation is most likely when innovators can expect to reap rewards in a fair marketplace. Innovation will be chilled if a potential innovator believes the value of the innovation will be captured by those that control the network and have the power to behave strategically. To the extent an actor is structurally capable of acting strategically, the rational innovator will reckon that capacity as a cost to innovation.

If that strategic actor owns the transmission lines itself, it has the power to decide what can and cannot be done on the Internet. The result is effectively to centralize Internet innovation within that company and its licensees. While there is a debate in the economic literature about the wisdom of centralizing control over improvements to any given innovation, we think the history of the Internet compellingly demonstrates the wisdom of letting a myriad of possible improvers work free of the constraints of a central authority, public or private. Compromising e2e [end-to-end] will tend to undermine innovation by putting one or a few companies in charge of deciding what new uses can be made of the network . . .

The point is not that cable companies would necessarily discriminate against any particular technology. Rather, the point is that the possibility of discrimination increases the risk an innovator faces when deciding whether to design for the Internet. Innovators are likely to be cautious about how they spend their research efforts if they know that one company has the power to control whether that innovation will ever be deployed. The increasing risk is a cost to innovation, and this cost should be expected to reduce innovation.

130. Benkler, Intellectual Property, supra note 12, at 29.

131. See id., at 32-38 (noting two feedback effects that "amplify the direction and speed of the shift in strategies, and lock them in institutionally." First, "organizations invest in creating demand for their products." This rebounds to the advantage of dominant commercial firms. Second, dynamic adjustment of organizations will accelerate changes in behaviors. Expectations about commercial mass media actions will result in adopting such "strategies sooner than might otherwise be warranted by a static assessment of market conditions immediately following an increase in property rights. Moreover, expectations regarding the

^{128.} See Lemley & Lessig, The End of End-to-End, supra note 26, at 937-38 (citing Charles R. Morris & Charles H. Ferguson, How Architecture Wins Technology Wars, HARV. BUS. REV. 86, 88-89 (Mar.-Apr. 1993)).

Id.

which includes other layers of the platform when they are vertically integrated. The implication here is that we cannot just wait for the platform to open. Doing nothing in the face of accelerating closure of the communications platform is doing harm.¹³² Some of the harm cannot be undone.¹³³ Rectifying what can be fixed after the fact is immensely time consuming, costly and inevitably more intrusive.¹³⁴

B. The Transmission Bottleneck And Vertical Market Power

1. Transmission as a Choke Point

The empirical evidence suggests that Benkler's observation about physical capital is correct at one level, but it underestimates the strategic value of transmission facilities. The size of investment in devices has grown dramatically, but at a rapidly declining cost per device (especially quality adjusted), which has fueled the shift to distributed computing. Technological devices have become affordable on an expanding scale. Technology use, then, should be expanding at a similar pace. When it comes to the Internet, however, control over the transmission network has become an obstacle to proliferation of advanced Internet services because network owners are using strategic control over the physical layer to retard developments at other layers. Transmission is the chokepoint. Shrinking in relative importance in the overall industry (measured by dollars of investment), and declining in cost per unit, those in control of transmission networks retain immense leverage because the network requires centralized, fixed investments that are capital intensive.

Physical capital is not the barrier the advocates of closed platforms The amount of investment needed is not make it out to be. extraordinary, compared to the total investment being made at all the layers of the communications platform. No sooner does the political movement in support of claims that higher returns are needed to promote investment in the physical layer crystallize, than we discover that the needed investment has already been made or is not needed. For example, the "fiber-to-the outhouse" movement of the late 1980s claimed that fiber optic capacity had to be deployed on an accelerated basis not

dynamic effects on institutional development will create particularly intense incentives to adopt" the dominant commercial strategy.).

^{132.} See Bar, supra note 51.

^{133.} See Lemley & Lessig, The End of End-to-End, supra note 26, at 16 (rejecting this on two grounds, first because it causes much greater costs when one decides to open the market after it has been deployed as closed and second because it is difficult to know what the costs of closure are. They argue that the prudent course is to start with open platforms, given their clear superiority and wait and see).

^{134.} See id. at 956-57.

only throughout the network backbone, but also to the smallest enduser.¹³⁵ This argument failed to carry the day— we still enjoyed the Internet explosion. Today again, we find that between 75 and 85 percent of the country is already wired for high-speed access.¹³⁶ With availability running far ahead of subscription, it has become clear that applications are the missing ingredient, not facilities.¹³⁷

What proves to be the most important characteristic of transmission facilities is that the capital assets are centralized and fixed, which gives the owners an incentive to exploit their leverage over their geographic area of deployment.¹³⁸ Leverage over the first (or last mile), which connects the end user to the communications network is key, particularly if one entity combines control over the physical layer with control at other layers, achieving vertical integration.¹³⁹

Most communications markets have a small number of competitors. In the high speed Internet market, there are now two main competitors and the one with the dominant market share has a substantially superior technology.¹⁴⁰ When or whether there will be a third, and how well it will be able to compete, is unclear. This situation is simply not sufficient to sustain a competitive outcome.¹⁴¹ The physical facilities do not invite

Id.

^{135.} Mark Cooper, The Importance of ISPs in The Growth of The Commercial Internet: Why Reliance on Facility-Based Competition Will Not Preserve Vibrant Competition and Dynamic Innovation on the High-Speed Internet, Attachment A to "Comments of the Texas Office of People's Council, et al," Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities Universal Service Obligations of Broadband Providers Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review – Review of Computer III and ONA Safeguards And Requirements, Federal Communications Commission, CC Dockets Nos. 02-33, 98-10. 95-20, (July 1, 2002) [hereinafter Cooper, *The Importance of ISPs*].

^{136.} See Jonathan Krim, FCC Rules Seek High-Speed Shift; Phone Firms Would Keep Cable Rights, WASH. POST, Feb. 15, 2002, at E1.

^{137.} See, e.g., Todd Spangler, Crossing the Broadband Divide, PCMAGAZINE, February 12, 2002, at 102.

^{138.} See Weiser, supra note 5, at 9. Weiser's central assumption is that the capital investment required for communications platforms is not fixed:

In short, particularly in information industries where a network is not built on fixed capital investment which may give rise to natural monopolies, competition may well be procompetitive by increasing innovation in a manner that would not occur under a lowest common denominator standard, such as that which often results from joint standard setting.

^{139.} COOPER, CABLE MERGERS, supra note 76, at chs. 4 and 5.

^{140.} NATIONAL RESEARCH COUNCIL, BROADBAND: BRINGING HOME THE BITS (2002).

^{141.} See Lemley & Lessig, The End of End-to-End, supra note 26, at 953;

It is true that DSL lines are currently open to certain indirect forms of ISP competition. But this is not the result of the operation of the market. Rather, it is the result of regulation. DSL service is provided by phone companies, and Congress and the FCC have historically been willing to regulate phone companies and to require open interconnection during their deregulation. It would be ironic if

vibrant competition. The existence of too few competitors can slow the innovation process if those in control seek to use their position to block innovation.¹⁴² Controlling access to the physical platform (via use of market power) confers a great ability to affect the entire platform because of the ease of manipulating its core.¹⁴³ Denial of access to the physical layer can distort innovation located in the code, applications and content layers by masking what may seem to be a software problem, by hardware/infrastructure actions.¹⁴⁴

142. See Langlois, *supra* note 14, at 44 (noting that it is possible for system competition to have beneficial effects, but there must be many competing systems)

Another way to see this issue is to note that, when there is vibrant intersystem competition, there are more possible entry points for innovation. Multiple competing systems provide a way not only of providing variety but also of experimenting with organizational and design alternatives.

143. See id. at 51 (calling this "scope" and seeing this as a fundamental issue);

Here the idea of the "scope" of the standard becomes important. The owner of a standard that control the compatibility of a large fraction of the components of a system is in a much better position to close off avenues of innovation that threaten the rent-earning potential of the standard. The owner of a standard with relatively smaller scope is always in danger of being "invented around" or made obsolete if it closes off access or otherwise exercises market power unduly.

Id.

144. See id. at 216; Lemley & Lessig, The End of End-to-End, supra note 26, at 939-40 (quoting FRANÇOIS BAR & CHRISTIAN SANDVIG, RULES FROM TRUTH: POST-CONVERGENCE POLICY FOR ACCESS 22 (Sept. 2000) (unpublished manuscript, on file with The UCLA Law Review)) (Flexibility in design is a feature of digital networks. The use of the network becomes a question of software implementation separable in fundamental ways from the ownership or even the nature of the network itself. Francois Bar and Christian Sandvig explain);

In past networks, the communication platform and its configuration were "hardwired" in the specific arrangement of electro-mechanical devices that formed a particular communication network—the logical architecture of the network precisely reflected its physical architecture. One had to own the network to change that arrangement. By contrast, platform configuration in digital networks depends on ability to program the network's control software. Control over network configuration thus becomes separable from network ownership. Multiple network

competition over DSL lines were to be cited as an example of the market at work, when in fact those DSL lines are open to competition only because regulators have forced them to be.

Given that historical accident, should we assume that DSL and the future wireless and satellite technologies provide enough competition that we don't need to encourage any more? We think not. First, it is admittedly true that the existence of facilities-based competition lessens the harm cable companies will do by closing the ISP market. But lessening the harm is not the same thing as eliminating it. Even if DSL does provide a partially competitive market for some ISPs who want to serve broadband access to some customers, it simply makes no sense as a matter of economic policy to foreclose the largest possible market for ISP competition, particularly when doing so serves no good end.

Id.

Id.

2. Vertical Leverage in Communications Networks

For the last several decades of the 20th century general analysis concerning vertical integration in market structure was muted. However, a number of recent mergers in the communications industries, between increasingly large owners of communications facilities, have elicited vigorous analysis of the abuse of vertical market power. (e.g. AT&T/MediaOne, AOL/Time Warner (and Time Warner/Turner before it), SBC Communications Inc. (SBC)/Ameritech, and Bell Atlantic/GTE)¹⁴⁵ As one former antitrust official put it, "[t]he increasing number of mergers in high-technology industries has raised both horizontal and vertical antitrust issues... the interest in and analysis of vertical issues has come to the forefront.¹⁴⁶

Where concerns about vertical integration have traditionally been raised, they focused on integration for critical inputs across markets. The traditional anticompetitive conduct and negative market performance that can emerge from vertical integration are well known. By integrating across stages of production, incumbents can create barriers to entry by forcing potential competitors to enter at more than one stage, making competition much less likely due to increased capital requirements. ¹⁴⁷ Vertical mergers can also foreclose input markets to competitors.¹⁴⁸

Exclusive and preferential deals for the use of facilities and products compound the problem. They "reduce the number of alternative sources for other firms at either stage, [which] can increase the costs of market or contractual exchange."¹⁴⁹ Integrated firms can impose higher costs on their rivals, or degrade their quality of service to gain an advantage. "[F]or example, the conduct of vertically integrated firms increase[s] risks for nonintegrated firms by exposing downstream specialists to regular or

platforms, supporting a variety of communication patterns, can simultaneously coexist on a single physical infrastructure.

Thus, the decision to build intelligence into the network may not be an all-ornothing proposition. Rather, we can preserve the viability of e2e systems by keeping intelligence out of the hardware design and instead building it into some software layers on an as- needed basis.

Id.

^{145.} See Time Warner Inc., 123 F.T.C. 171 (1997) [hereinafter *Time Warner/Turner/TCI*]. In the Time Warner/Turner/TCI merger analysis, the FTC found that entry into the distribution market was difficult in part because of vertical leverage.

^{146.} Daniel L. Rubinfeld & Hal. J. Singer, *Open Access to Broadband Networks: A Case Study of the AOL/Time Warner Merger*, 16 BERKELEY TECH. LJ. 631 (2001).

^{147.} See Martin, K. Perry, Vertical Integration: Determinants and Effects, in HANDBOOK OF INDUSTRIAL ORGANIZATION 183, 247 (Richard Schmalensee & Robert D. Willigs eds., 1989); SCHERER & ROSS, supra note 1, at 526.

^{148.} See WILLIAM G. SHEPHERD, THE ECONOMICS OF INDUSTRIAL ORGANIZATION 289-290 (3d ed. 1990).

^{149.} Perry, supra note 147, at 246; see also SHEPHERD, supra note 148, at 294.

occasional price squeezes."150 Vertical integration facilitates price squeezes and enhances price discrimination.¹⁵¹

Moreover, the small number of communications facilities in the physical layer can create a transmission bottleneck that would lead directly to the problem of vertical leverage or market power. "[A] vertically integrated broadband provider such as AT&T will have a strong incentive and opportunity to discriminate against unaffiliated broadband content providers."¹⁵² There is a growing body of theoretical and empirical analysis reinvigorating concerns about the anti-competitive impacts of vertical integration, especially in the cable industry.¹⁵³ Facility owners with large market shares do not hesitate to criticize the anticompetitive impacts of other facility owners who gain a large market share.¹⁵⁴ They understand all too well that closed communications facilities means market leverage, which creates the incentive to discriminate against both alternative transmission media, and alternative suppliers.

Problems caused by vertical integration are particularly troubling in communications markets because a communications provider with control over essential physical facilities can exploit its power in more than one market. For example, a local voice service provider with control over physical transmission can provide vertically integrated digital subscriber line (DSL) service, preventing competition from other Internet providers

SCHERER & ROSS, supra note 1, at 524.

2003]

^{150.} SCHERER & ROSS, supra note 1, at 526.

^{151.} Other behavior effects may occur, for example, collusion, mutual forbearance and reciprocity may exist where the small number of interrelated entities in the industry recognize and honor each others' spheres of influence. The final behavioral effect is to trigger a rush to integrate and concentrate. Being a small independent entity at any stage renders the company extremely vulnerable to a variety of attacks. See SHEPHERD, supra note 148, at 290.

Economists describe the process as follows: [s]ubstitution elasticities of unity and less normally imply that inputs are indispensable, that is, that no output can be produced until at least some use is made of each relevant input. When the monopolist of an input indispensable in this sense integrates downstream, it can make life difficult for remaining downstream competitors. It can refuse to sell the input to them, driving them out of business. Or it can sell it to them at monopoly prices, meanwhile transferring input at marginal cost to its affiliated downstream units, which, with their lower costs, can set end product prices at levels sufficiently low to squeeze the rivals out of the market.

^{152.} Jerry A. Hausman et al., Residential Demand for Broadband Telecommunications and Consumer Access to Unaffiliated Internet Content Providers, 18 YALE J. ON REG. 129, 134 (2001).

^{153.} For general arguments see Thomas G. Krattenmaker & Steven C. Salop, Anticompetitive Exclusion: Raising Rivals' Costs to Achieve Power Over Price, 96 YALE L.J. 209 (1986); J.A. Odover et al., Nonprice Anticompetitive Behavior by Dominant Firms Toward the Producers of Complementary Products, in ANTITRUST AND REGULATION: ESSAYS IN MEMORY OF JOHN J. MCGOWAN 115 (Franklin M. Fisher ed., 1985).

^{154.} COOPER, CABLE MERGERS, supra note 76, at 77-85.

over the same network.¹⁵⁵ At the same time, the company can bundle its voice services with the DSL service. Consumers may be more likely to choose the communications service that can provide for all of their needs, thereby inhibiting competition in the voice market as well.

V. PHYSICAL FACILITIES AS A SOURCE OF MARKET POWER IN COMMUNICATIONS PLATFORMS: THE BROADBAND INTERNET

The previous section rejects the theoretical claim of the superiority of closed communications platforms. This Section rejects the claim on the basis of historically observed strategic behaviors surrounding the emerging closed platform of the high speed Internet. The section following this one will examine the same issues in the context of the long-standing closed video platform world of the cable TV companies. The behavioral analysis in this section relies on a variety of analyses from participants in the sector including AT&T, ¹⁵⁶ AOL,¹⁵⁷ analyses prepared by experts for local¹⁵⁸ and long distance¹⁵⁹ telephone companies,

158. See Hausman et al., supra note 152.

^{155.} Cooper, The Importance of ISPs, supra note 135.

^{156.} AT&T in Canada before it became the nation's largest cable company. See AT&T Canada Long Distance Services, Comments of AT&T Canada Long Distance Services Company, before the Canadian Radio-television and Telecommunications Commission, Telecom Public Notice CRTC 96-36: Regulation of Certain Telecommunications Service Offered by Broadcast Carriers, (1997) [hereinafter AT&T Canada]. The AT&T policy on open access after it became a cable company was first offered in a Letter from David N. Baker, Vice President, Legal & Regulatory Affairs, Mindspring Enterprises, Inc., James W. Cicconi, General Council and Executive Vice President, AT&T Corp., and Kenneth S. Fellman, Esq., Chairman, FCC Local & State Government Advisory Committee, to William E. Kennard, Chairman of FCC (Dec. 6, 1999), available at http://www.fcc.gov/mb/attmindspringletter.txt. Virtually no commercial activity took place as a result of the letter, which was roundly criticized. Subsequently their activities were described in Peter S. Goodman, AT&T Puts Open Access to a Test: Competitors Take Issue with Firm's Coveted First-Screen Presence, WASH. POST, Nov. 23, 2000, at E1. AT&T in the U.S. in situations where it does not possess an advantage of owning wires, see AT&T Corp., Reply Comments, Deployment of Wireline Servs. Offering Advanced Telecomms. Capability CC Docket No. 98-147, (1998); see AT&T Corp., Reply comments, Opposition to Southwestern Bell Tel. Co. Section 271 Application for Tex., Application of SBC Communications Inc., Southwestern Bell Tel. Co., & Southwestern Bell Communications Servs., Inc. d/b/a Southwestern Bell Long Distance for Provision of In-Region InterLATA Servs. in Tex. (2000), at http://gullfoss2.fcc.gov/ prod/ecfs/comsrch_v2.cgi [hereinafter AT&T SBC].

^{157.} See America Online, Inc., Comments, Transfer of Control of FCC Licenses of MediaOne Group Inc., To AT&T Corp., CS Docket 99-251, (filed Aug. 23, 1999) (providing, at the federal level, AOL's most explicit analysis of the need for open access) [hereinafter AOL, FCC]; America Online Inc., "Open Access Comments of America Online, Inc.," before the Department of Telecommunications and Information Services, San Francisco, October 27, 1999 [hereinafter, AOL, SF] (on file with author).

^{159.} John B. Hayes, Jith Jayaratne, and Michael L. Katz, An Empirical Analysis of the Footprint Effects of Mergers Between Large ILECS, citing "Declaration of Michael L. Katz and Steven C. Salop," submitted as an attachment to Petition to Deny of Spring Communications Company L.P, in Ameritech Corp. & SBC Communications, Inc., for

Wall Street analyses of the business models of dominant, vertically integrated cable firms,¹⁶⁰ and observations offered by independent ISPs¹⁶¹ and small cable operators.¹⁶²

The observable behavior of the incumbent wire owners contradicts the theoretical claims made in defense of closed platforms.¹⁶³ The track record of competition in the physical facilities of telephony certainly should not be a source of encouragement for those looking for dynamic Schumpeterian monopolists.¹⁶⁴

A. The Physical Choke Points

Whether we call them essential facilities,¹⁶⁵ choke points¹⁶⁶ or anchor points,¹⁶⁷ the key leverage point of a communications network is

163. See Lemley & Lessig, *The End of End-to-End, supra* note 26, at 13 (pointing out that claims in which "economic theory holds that" cable companies "will have no incentive to do so" are contradicted and cautioned by the adage that, "One should be skeptical of a theory whose predictions are so demonstrably at odds with reality.").

164. See Weiser, supra note 5, at n.136 (suggesting that we "ask whether, 18 years after the rollout of this technology, will consumers benefit from a number of alternative providers..." He then answers the question by looking at the wrong industry (cellular instead of cable)).

165. See Langlois, supra note 14, at 195.

166. See Cooper, Open Access, supra note 3, at 1013.

167. Bernstein, *supra* note 160, at 18, 21.

[T]he current set of alternatives for reaching customers with broadband connections is inadequate. At least for the time being, cable is closed, meaning that much of the value is, in effect, ceded to the platform rather than captured by the content/applications providers

...[B]roadband access platforms are the anchor points for much of the value at stake and vehicles for accessing new revenue streams. Furthermore, access is

Consent to Transfer of Control, CC Dkt. No. 98-141 (filed Oct. 15, 1998) and Petition to Deny of Spring Communications Company L.P, in GTE Corporation and Bell Atlantic Corp. for Consent to Transfer of Control, CC Docket. No. 98-184 (filed Nov. 23, 1998) (on file with author).

^{160.} Sanford C. Bernstein and McKinsey and Company, *Broadband!*, January, 2000 [hereinafter Bernstein] (on file with author); Merrill Lynch, AOL *Time Warner*, February 23, 2000 [hereafter *Merrill Lynch*]; Paine Webber, *AOL Time Warner: Among the World's Most Valuable Brands*, March 1, 2000 [hereinafter Paine Webber]; Goldman Sachs, *America Online/ Time Warner: Perfect Time-ing*, March 10, 2000 [hereinafter *Goldman Sachs*] (on file with author).

^{161.} Earthlink, the first ISP to enter into negotiations with cable owners for access, has essentially given up and is vigorously seeking an open access obligation. *See* Notice of Ex Parte, Presentation Regarding the Applications of America Online, Inc. & Time Warner Inc. for Transfers of Control CS Docket No 00-30 (filed Oct. 18, 2000), *available at* http://gullfoss2.fcc.gov/prod/ecfs/comsrch_v2.cgi [hereinafter *Earthlink*]; *Northnet*, CS-Docket No. 0030.

^{162.} *Cf.* American Cable Association, Comments, *In re* Implementation of the Cable Television Consumer Protection & Competition Act of 1992, Development of Competition in Video Programming Distribution: Section 628(c)(5) of the Communications Act: Sunset of Exclusive Contract Prohibition, CS Docket No. 01-290 (filed Dec. 3, 2001) [hereinafter *ACA*] *available at* http://gullfoss2.fcc.gov/prod/ecfs/comsrch_v2.cgi.

controlling access to facilities.¹⁶⁸ Experts for the local telephone companies, in opposing the merger of AT&T and MediaOne, made this point arguing that "the relevant geographic market is local because one can purchase broadband Internet access only from a local residence"169 and that "a dominant market share is not a necessary condition for discrimination to be effective."¹⁷⁰ "[A] hypothetical monopoly supplier of broadband Internet access in a given geographic market could exercise market power without controlling the provision of broadband access in neighboring geographic markets."171

The essential nature of the physical communication platform was the paramount concern for AT&T in determining interconnection policy for cable networks in Canada.¹⁷² AT&T attacked the claim made by cable companies that their lack of market share indicates that they lack market power, arguing that small market share does not preclude the existence of market power because of the essential function of the access input to the production of service.¹⁷³ AT&T further argued that open

The key, after all, is the ability to use "first mile" pipeline control to deny consumers direct access to, and thus a real choice among, the content and services offered by independent providers. Open access would provide a targeted and narrow fix to this problem. AT&T simply would not be allowed to control consumer's ability to choose service providers other than those AT&T itself has chosen for them. This would create an environment where independent, competitive service providers will have access to the broadband "first mile" controlled by AT&T - the pipe into consumers' homes - in order to provide a full, expanding range of voice, video, and data services requested by consumers. The ability to stifle Internet-based video competition and to restrict access to providers of broadband content, commerce and other new applications thus would be directly diminished.

169. Hausman et al., supra note 152, at 135.

- 170. Id. at 156.
- 171. Id. at 135.
- 172. AT&T Canada, supra note 156, at 12.

Each of these pronouncements made by regulators, policy makers and individual members of the industry reflects the strongly held view that access to the underlying facilities is not only necessary because of the bottleneck nature of the facilities in question, but also because it is critical for the development of competition in the provision of broadband services. AT&T Canada LDS shares this view and considers the control exercised by broadcast carriers over these essential inputs is an important factor contributing to the dominance of broadcast carriers in the market for access services

Id.

173. Id. at 8-9.

By contrast, the telephone companies have just begun to establish a presence in the broadband access market and it will likely take a number of years before they have

currently a bottleneck, and access winners have the potential to leverage their privilege positioned to ensure long-term value creation.

Id.

^{168.} That is exactly what AOL said about AT&T, when AOL was a nonaffiliated ISP. See AOL, FCC, supra note 157, at 13.

Id.

access "obligations are not dependent on whether the provider is dominant. Rather they are necessary in order to prevent the abuse of market power that can be exercised over bottleneck functions of the broadband access service."¹⁷⁴

AT&T maintained that the presence of a number of vertically integrated facilities owners does not solve the fundamental problem of access that nonintegrated content providers face, and that AT&T would inevitably be at a severe disadvantage. AT&T pointed out that since independent content providers will always outnumber integrated providers, competition could be undermined by vertical integration. In order to avoid this outcome, even multiple facilities owners must be required to provide non-discriminatory access.¹⁷⁵ This also applies in the ISP arena. AOL also believed that the presence of alternative facilities does not eliminate the need for open access.¹⁷⁶

*Id.*at 8.

Id. at 9 (emphasis in original.

174. *Id.* at 24.

175. Id. at 12.

Because there are and will be many more providers of content in the broadband market than there are providers of carriage, there always will be more service providers than access providers in the market. Indeed, even if all of the access providers in the market integrated themselves vertically with as many service providers as practically feasible, there would still be a number of service providers remaining which will require access to the underlying broadband facilities of broadcast carriers.

Id.

176. AOL, FCC, supra note 157, at 14.

[A]n open access requirement] would allow ISPs to choose between the first-mile facilities of telephone and cable operators based on their relative price, performance, and features. This would spur the loop-to-loop, facilities-based competition contemplated by the Telecommunications Act of 1996, thereby offering consumers more widespread availability of Internet access; increasing affordability due to downward pressures on prices; and a menu of service options varying in price, speed, reliability, content and customer service

Id.

Another indication that the availability of alternative facilities does not eliminate the need for open access policy can be found in AOL's conclusion that the policy should apply to both business and residential customers. If ever there was a segment in which the presence of two facilities competing might alleviate the need for open access requirement, the business segment is it. AOL rejected the idea.

Id. at 1-2.

extensive networks in place. This lack of significant market share, however, is overshadowed by their monopoly position in the provision of local telephony services

[[]I]n any event, even if it could be argued that the telephone companies are not dominant in the market for broadband access services because they only occupy a small share of the market, there are a number of compelling reasons to suggest that measures of market share are not overly helpful when assessing the dominance of telecommunications carriers in the *access* market.

Two or three vertically integrated facilities in the broadband arena will not be enough to ensure free competition.¹⁷⁷ It is also important to note the consensus that cable is the dominant and preferred technology. Wall Street analysts dismiss satellite and wireless as near-term competitors for cable modem service and have an increasingly pessimistic view of DSL's ability to compete given the applications that will drive residential video markets.¹⁷⁸ Cable's advantages are substantial, and DSL is not likely to be able to close the gap.¹⁷⁹

One simple way to understand the relative capabilities of the two major competing broadband networks is to see how the market values them. Cable TV system owners sell their systems for three to four times what telephone and satellite subscribers do, in spite of the fact that the revenue per subscriber in the core monopoly service is about the same in the industries.¹⁸⁰ Hazelett and Bittlingmayer have recently shown that when firms possess market power, and law enforcement authorities declare that they are not going to restrain the abuse of that power, the stock market revalues the firm's assets to reflect the future value of monopoly rents.¹⁸¹ This is an unremarkable result that has been demonstrated in the cable TV industry since deregulation in 1984. This also demonstrates why the abuse of market power can be good for stockholders, who enjoy a higher rate of profit, while perhaps not for consumers or the economy in general.

B. Implementing Closed Platforms In The New Product Space

It is hard to imagine private entities that possess such clear market power would refrain from using it to their advantage. Proprietary control of the physical facilities has not led to open networks. There was never any reason to expect otherwise, as AT&T foresaw. In Canada, AT&T tied the domination of access over the last mile to proprietary standards.

^{177.} See Mark Cooper, "Breaking the Rules", attached to Petition to Deny of Consumers Union, Consumer Federation of America and Media Access Project, Applications for Consent to Transfer of Control of Licenses, MediaOne Group, Inc. Transferor to AT&T Corp., Transferee, CS 99-251 (filed August 23, 1999) (on file with author).

^{178.} See Bernstein, supra note 160, at 30, 33, 50-51.

^{179.} See id. at 7; Merrill Lynch, supra note 160, at 33.

^{180.} See Mark Cooper, Transforming the Information Superhighway Into a Private Toll Road, (1999), (discussion of cable and telephone subscriber sales. Cable subscribers sell for \$4500 to \$5000. Telephone subscribers sell for \$1000 to \$1500. Satellite subscribers sell for about \$2000.) available at http://www.consumerfed.org/bbreport.pdf (on file with author).

^{181.} Thomas W. Hazlett & George Bittlingmayer, *The Political Economy of Cable "Open Access,"* (AEI-Brookings Joint Center for Regulatory Studies, Working Paper No. 01-06, 2001), *available at* http://www.aei.brookings.org/publications/working/working_01_06.pdf.

To the extent that standards are developed for interfacing with broadband access services, the carriers who provide these services should not be permitted to implement any non-standard, proprietary interfaces, as this would be contrary to the development of an open "network of networks". In addition, any new network or operational interface that is implemented by a broadband access provider should be made available on a non-discriminatory basis . . .¹⁸²

As concern over this leverage has grown, analysts have identified two distinct types of discrimination. Vertically integrated broadband providers may practice content discrimination or conduit discrimination.¹⁸³

1. Content Discrimination

Content discrimination has been the focal point of concern in relation to high-speed Internet services. Content discrimination involves an integrated provider "insulating its own affiliated content from

^{182.} AT&T Canada, supra note 156, at 23.

^{183.} See Time Warner / Turner / TCI, supra note 145, at 180. The FTC's enumeration of the ways in which the Time Warner/Turner/TCI merger was a threat to lessen competition is instructive for both the cable TV and the broadband Internet markets. The vertical integration and horizontal concentration would increase the incentive and ability to engage in both conduit discrimination and content discrimination.

³⁸a. Enabling Respondent Time Warner to increase prices on its Cable Television Programming Services sold to MVPDs, directly or indirectly (e.g., by requiring the purchase of unwanted programming). Through its increased negotiating leverage with MVPDs, including through purchase of one or more "marquee" or "crown jewel" channels on purchase of other channels.

b. Enabling Respondent Time Warner to increase prices on its Cable Television Programming Services sold to MVPDs by raising barriers to entry by new competitors or to repositioning by existing competitors, by preventing such rivals from achieving sufficient distribution to realize economies of scale; these effects are likely, because

⁽¹⁾ Respondent time Warner has direct financial incentives as the post-acquisition owner of the Turner Cable Television Programming Services not to carry other Cable Television Programming Services that directly compete with Turner Cable Television Programming Services; and

⁽²⁾ Respondent TCI has diminished incentives and diminished ability to either carry or invest in Cable Television Programming Services that directly compete with the Turner Cable Television Programming Services because the PSA agreements require TCI to carry Turner's CNN, Headline News, TNT and WTBS for 20 years, and because TCI, as a significant shareholder of Time Warner, will have significant financial incentives to protect all of Time Warner's Cable Television Programming Services; and

c. Denying rival MVPDs and any potential rival MVPDs of Respondent Time Warner competitive prices for Cable Television Programming Services, or charging rivals discriminatorily high prices for Cable Television Programming Services.

competition by blocking or degrading the quality of outside content."¹⁸⁴ It benefits the vertically integrated entity "by enhancing the position of its affiliated content providers in the national market by denying unaffiliated content providers critical operating scale and insulating affiliated content providers from competition."¹⁸⁵

AT&T identified four forms of anticompetitive leveraging bundling, price squeeze, service quality discrimination, and first mover advantage.¹⁸⁶ It describes the classic vertical leveraging tools of price squeezes and quality discrimination as content discrimination. Even after AT&T became this nation's largest cable TV company, it criticized local telephone companies for abusing their monopoly control over their telephone wires. AT&T complained about bottleneck facilities, vertical integration, anticompetitive bundling of services, and the distortion of competition when it opposed the entry of SBC into the long distance market in Texas.¹⁸⁷ These are the very same complaints AOL made about AT&T at about the same time.¹⁸⁸ AOL expressed related concerns about the manipulation of technology and interfaces:

... allowing a single entity to abuse its control over the development of technical solutions – particularly when it may have interests inconsistent with the successful implementation of open access – could indeed undermine the City's policy. It is therefore vital to ensure that unaffiliated ISPs can gain access comparable to that the cable operators choose to afford to its cable-affiliated ISP.¹⁸⁹

The dominant and vertically integrated position of cable broadcast carriers requires a number of safeguards to protect against anticompetitive behaviour. These carriers have considerable advantages in the market, particularly with respect to their ability to make use of their underlying network facilities for the delivery of new services. To grant these carriers unconditional forbearance would provide them with the opportunity to leverage their existing networks to the detriment of other potential service providers. In particular, unconditional forbearance of the broadband access services provided by cable broadcast carriers would create both the incentive and opportunity for these carriers to lessen competition and choice in the provision of broadband service that could be made available to the end customer . . .

The telephone companies also have sources of market power that warrant maintaining safeguards against anticompetitive behaviour. For example, telephone companies are still overwhelmingly dominant in the local telephony market and, until this dominance is diminished, it would not be appropriate to forebear unconditionally from rate regulation of broadband access services.

Id.

189. AOL, SF, supra note 157, at 8.

^{184.} Hausman et al., supra note 152, at 158.

^{185.} Id. at 159.

^{186.} AT&T Canada, supra note 156.

^{187.} *AT&T SBC*, *supra* note 156.

^{188.} AT&T Canada, supra note 156, at 15-16.

Long distance companies and competitive local exchange carriers have similar concerns about the merging local exchange carriers. As their experts argued in the proposed SBC-Ameritech and Bell Atlantic-GTE mergers:

These mergers will have competition in local exchange, interexchange, and combined-service markets due to footprint effects. The economic logic of competitive spillovers implies that the increase in [the incumbent local exchange carrier (ILEC)] footprints resulting from these proposed mergers would increase the ILECs' incentive to disadvantage rivals by degrading access services they need to compete, thereby harming competition and consumers.¹⁹⁰

The experts for the local telephone companies identified a series of tactics that a vertically integrated broadband provider could use to disadvantage competing unaffiliated content providers.¹⁹¹

Wall Street analysts point out that the key to controlling the supply side is controlling essential functions through proprietary standards.¹⁹² Independent ISPs point out that cable operators like AOL use control over functionalities to control the services available on the network.¹⁹³

Id.

192. See Bernstein, supra note 160, at 57.

Thus, the real game in standards is to reach critical mass for your platform without giving up too much control. This requires a careful balance between openness (to attract others to your platform) and control over standards development (to ensure an advantaged value-capture position). Of course, the lessons of Microsoft, Cisco, and others are not lost on market participants, and these days no player will willingly cede a major standards-based advantage to a competitor. Therefore, in emerging sectors such as broadband, creating a standards-based edge will likely require an ongoing structural advantage, whether via regulatory discontinuities, incumbent status, or the ability to influence customer behavior.

Video streaming has received an immense amount of attention not only because it might compete directly with the cable TV product, but also because it embodies the qualitative leap in functionality and quantum jump in speed that broadband Internet provides.

^{190.} Hayes et al., *supra* note 159, at 1.

^{191.} Hausman et al., *supra* note 152, at 160-62.

First, it can give preference to an affiliated content provider by caching its content locally... Such preferential treatment ensures that affiliated content can be delivered at faster speeds than unaffiliated content.

Second, a vertically integrated broadband provider can limit the duration of streaming videos of broadcast quality to such an extent that they can never compete against cable programming . . .Third, a vertically integrated firm such as AT&T or AOL-Time Warner could impose proprietary standards that would render unaffiliated content useless. . .Once the AT&T standard has been established, AT&T will be able to exercise market power over customers and those companies trying to reach its customers.

Id.

^{193.} See Hausman et al., supra note 152, at 133.

Cable operators have continued to insist on quality of service restrictions by unaffiliated ISPs, which places the ISPs at a competitive disadvantage.¹⁹⁴

Cable operators must approve new functionalities whether or not they place any demands on the network. AT&T's control of the architecture is just as explicit. It will pick and choose which service providers get the fastest speeds. The favored service providers are those affiliated with AT&T.¹⁹⁵

Price squeeze and extraction of rents are apparent in the implementation of closed platforms. Hazlett and Bittlingmayer cite Excite@Home executive Milo Medin describing the terms on which

194. Time Warner's Term Sheet and AT&T public statements about how it will negotiate commercial access after its technical trial give a clear picture of the threat to dynamic innovation on the Internet. The companies' own access policies reveal the levers of market power and network control that stand to stifle innovation on the Internet. Under the imposed conditions, the commercial space available for unaffiliated and smaller ISPs (where much innovation takes place) is sparse and ever shrinking.

195. The AT&T preference is illustrated as follows:

Radio GoGaGa [is] a music radio network that transmits over the Internet [and] depends on word-of-mouth and bumper stickers to attract users.... [Radio GoGaGa f]ounder Joe Pezzillo worries that the competitive gap could widen as broadband brings new business models.

He envisions AT&T making deals with major music labels to deliver its own Internet radio, with AT&T providing the fastest connections to its partners and slower connections to sites like his. "Someone's not going to wait for our page to load when they can get a competitor's page instantly," Pezzillo said.

AT&T says it has yet to formulate business models with partners, but the software the company has designed for the Boulder trial – demonstrated at its headquarters in Englewood, Colo[rado] last week – clearly includes a menu that will allow customers to link directly to its partners. Company officials acknowledge that AT&T's network already has the ability to prioritize the flow of traffic just as Pezzillo fears.

"We could turn the switches in a matter of days to be able to accommodate that kind of environment," said Patrick McGrew, an AT&T manager working on the technical details of the Boulder trial.

Though the Boulder trial is focused on technical issues alone, AT&T will study the way customers navigate the system as it negotiates with ISPs seeking to use its network.

Goodman, supra note 156.

Video streaming is foreclosed as a threat to Time Warner's services. By singling out current cable TV customers for an extremely high floor price for independent ISP broadband Internet service, Time Warner is leveraging its monopoly position in cable into the broadband Internet market.

Time Warner asserts complete control over video streaming by controlling the economic terms on which Quality of Service is offered.

Time Warner goes on to build a wall around the video market with pricing policy that dissuades ISPs from competing for the Internet business of cable TV customers. Time Warner buttresses that wall with a marketing barrier and a service quality barrier that can further dissuade ISPs from competing for TV customers *Northnet, supra* note 95, at 6-7.

cable operators would allow carriage of broadband Internet to AOL (before it owned a wire) as follows:

I was sitting next to [AOL CEO] Steve Case in Congress during the open access debates. He was saying that all AOL wanted was to be treated like Excite [@]Home. If he wants to be treated like us, I'm sure he could cut a deal with [the cable networks], but they'll take their pound of flesh. We only had to give them a 75 percent equity stake in the company and board control. The cable guys aren't morons.¹⁹⁶

Time Warner established a high price floor under sales of Internet service to cable TV customers, and demanded 75 percent of subscriber revenues and 25 percent of ancillary revenues. This squeezes the margin on such customers and renders potential video stream competitors vulnerable to price squeeze. ISPs are concerned that Time Warner also proposes to charge for bit consumption, rather than minimum speeds. This could make video streaming a very expensive proposition. Smaller ISPs have complained about minimum payments. They are also concerned about Time Warner's one-year minimum subscriber level requirement.

In the Internet age, leveraging control over the facility can accomplish more than content discrimination. The other layers of the platform, code or applications, can also be the victims of discrimination as well.

2. Conduit Discrimination

In the high speed Internet area, conduit discrimination has received less attention than content discrimination. This is opposite to the considerable attention it receives in the cable TV video service area.¹⁹⁷ Nevertheless, there are examples of conduit discrimination in the high speed Internet market.

In implementing conduit discrimination, the vertically integrated company would refuse to distribute its affiliated content over competing transmission media.¹⁹⁸ In so doing, it seeks to drive consumers to its

2003]

^{196.} Hazlett & Bittlingmayer, supra note 181, at 17 n.47 (quoting Jason Krause & Elizabeth Wasserman, Switching Teams on Open Access?, THE INDUSTRY STANDARD, Jan. 24, 2000, available at http://www.thestandard.com/article/display/1,1153,8903,00.html).

^{197.} See infra Part V.C.

^{198.} See Hausman et al., supra note 152, at 159.

[[]A] cable broadband provider will engage in conduit discrimination if the gain from additional access revenues from broadband users offsets the loss in content revenues from narrower distribution. . .

transmission media and weaken its rival. This is profitable as long as the revenue gained by attracting new subscribers exceeds the revenue lost by not making the content available to the rival. Market size is important here, to ensure adequate profits are earned on the distribution of service over the favored conduit.¹⁹⁹ Although some argue that "the traditional models of discrimination do not depend on the vertically integrated firm obtaining some critical level of downstream market share,"²⁰⁰ in reality, the size of the vertically integrated firm does matter since "a larger downstream market share enhances the vertically integrated firm's incentive to engage in discrimination."²⁰¹

Id.

Hence, a cable broadband provider will engage in conduit discrimination if the gain for additional access revenues from broadband users offsets the loss in content revenues form narrower distribution. What determines whether conduit discrimination will be profitable? Simply put, if a cable broadband transport provider that controls particular content only has a small fraction of the national cable broadband transport market, then that provider would have little incentive to discriminate against rival broadband transport providers *outside of its cable footprint.* The intuition is straightforward: out-of-franchise conduit discrimination would inflict a loss on the cable provider's content division, while out-of-region cable providers would be the primary beneficiaries of harm done to non-cable competitors.

Id. (footnote omitted).

200. Hausman et al., *supra* note 152, at 156 (footnote omitted). The ACA provides the calculation for cable operators:

The major MSOs will be the clear winners in these transactions. MSOs granted exclusive distribution rights will have an opportunity to attract DBS subscribers with exclusive programming, resulting in increased subscriber revenues (a minimum of \$40-\$50 per subscriber) and increased system values (at least \$3,500-\$5,000 per subscriber).

Where do ACA members fit into these transactions? Nowhere. ACA members operate locally, not regionally or nationally. In situations involving regional or national exclusive distribution rights, there is little incentive to carve out exceptions for smaller cable systems. For each small system subscriber lost under exclusivity, the vertically integrated program provider will likely lose revenue between \$0.10 and \$0.75 per month, depending on the service. In contrast, for each former DBS subscriber gained through regional or national exclusive program offerings, the MSO with exclusive distribution rights will gain all monthly revenue from that subscriber, plus increased system value. In economic terms, an external cost of this gain will be the cost to small cable companies and consumers of reduced program diversity.

ACA, supra note 162, at 13-14.

To capture the gains from such discrimination, the vertically integrated cable provider must have a cable footprint in which to distribute its broadband portal service, either through direct ownership or through an arrangement to share the benefits of foreclosure with other cable providers.

^{199.} See Rubinfeld & Singer, supra note 146, at 657.

^{201.} Hausman et al., *supra* note 152, at 156 (footnote omitted).

AT&T has been accused of conduit discrimination in the high speed Internet market.²⁰² The AOL-Time Warner merger has also raised similar concerns. The significance of AOL's switch to cable-based broadband should not be underestimated. This switch has a powerful effect on the hoped-for competition between cable modems and DSL.²⁰³ Although telephone companies are reluctant to admit that their technology will have trouble competing, their experts have identified the advantages that cable enjoys.²⁰⁴ Fearing that once AOL became a cable owner it would abandon the DSL distribution channel, the FTC required AOL to continue to make its service available over the DSL conduit.²⁰⁵

C. Bundling and Customer Lock In

The focal point of a leveraging strategy is bundling early in the adoption cycle to lock in customers. AOL has also described the threat of vertically integrated cable companies in the U.S.²⁰⁶ Once AT&T

Id. (footnotes omitted).

203. Bernstein, supra note 160, at 12-14; Merrill Lynch, supra note 160, at 33.

206. AOL has argued:

^{202.} See Comments of the Competitive Broadband Coalition, Implementation of the Cable Television Consumer Protection & Competition Act of 1992, Cable Services Bureau Dkt. No. 01-290, at 10-11 (Dec. 3, 2001).

CTCN [CT Communications Network Inc.], a registered and franchised cable operator, has been unable to purchase the affiliated HITS transport service from AT&T Broadband, the nation's largest cable operator, despite repeated attempts to do so... Based on its own experience and conversations with other companies who have experienced similar problems, CTCN believes that AT&T is refusing to sell HITS to any company using DSL technology to deliver video services over existing phone lines because such companies would directly compete with AT&T's entry into the local telephone market using both its own cable systems and the cable plant of unaffiliated cable operators. AT&T simply does not want any terrestrial based competition by other broadband networks capable of providing bundled video, voice and data services.

^{204.} See Hausman et al., supra note 152, at 149.

It is possible that at some point in the future new technologies will emerge, or existing technologies will be refined, in such a way that they will compete effectively with cable-based Internet services. . . [W]ithin the relevant two-year time horizon, neither DSL nor satellite-based Internet service will be able to offer close substitutes for cable-based Internet service. Hence, neither will be able to provide the price-disciplining constraint needed to protect consumer welfare.

Id.

^{205.} See Am. Online, Inc., No. C-3989, at 12 (Fed. Trade Comm'n Apr. 17, 2001), available at http://www.ftc.gov/os/2001/04/aoltwdo.pdf.

At every key link in the broadband distribution chain for video/voice/data services, AT&T would possess the ability and the incentive to limit consumer choice. Whether through its exclusive control of the EPG or browser that serve as consumers' interface; its integration of favored Microsoft operating systems in settop boxes; its control of the cable broadband pipe itself; its exclusive dealing with its

became the largest vertically integrated cable company selling broadband access in the U.S.,²⁰⁷ it set out to prevent potential competitors from offering bundles of services.²⁰⁸ Bundles could be broken up either by not allowing Internet service providers to have access to video customers, or by preventing companies with the ability to deliver telephony from having access to high-speed content.

AOL has argued that requiring open access early in the process of market development would establish a much stronger structure for a proconsumer, pro-competitive market.²⁰⁹ Early intervention prevents the architecture of the market from blocking openness, and thus avoids the difficult task of having to reconstruct an open market at a later time.²¹⁰ AOL did not hesitate to point out the powerful anticompetitive effect that integrating video services in the communications bundle could have. AOL argued that, as a result of a vertical merger, AT&T would take an enormous next step toward its ability to deny consumers a choice among competing providers of integrated voice/video/data offerings – a communications marketplace that integrates, and transcends, an array of communications services and markets previously viewed as distinct.²¹¹

Wall Street sees the first mover advantage both in the general terms of the processes that affect network industries, and in the specific advantage that cable broadband services have in capturing the most attractive early adopting consumers.²¹² First mover advantages have their greatest value where consumers have difficulty switching or substituting

own proprietary cable ISPs; or the required use of its own "backbone" long distance facilities; AT&T could block or choke off consumers' ability to choose among the access, Internet services, and integrated services of their choice. Eliminating customer choice will diminish innovation, increase prices, and chill consumer demand, thereby slowing the roll-out of integrated service.

AOL, FCC, supra note 157, at 11 (footnotes omitted).

^{207.} AT&T was the largest stockholder in Excite @Home and controlled the largest number of cable modem lines in the country.

^{208.} AT&T's demands in the open access negotiations spurred by the FCC, its multiple ISP trial, and its deal with AOL all indicate it sought to control bundling.

^{209.} AOL, FCC, supra note 157.

^{210.} See Krim, supra note 136 (on the higher cost of addressing problems ex post).

^{211.} AOL, FCC, supra note 157, at 9-10.

^{212.} See Merrill Lynch, supra note 160, at 38 ("If the technology market has a communications aspect to it, moreover, in which information must be shared (spreadsheets, instant messaging, enterprise software applications), the network effect is even more powerful."); Bernstein, *supra* note 160, at 26:

Thus, if the MSOs can execute as they begin to deploy cable modem services in upgraded areas, they have a significant opportunity to seize many of the most attractive customers in the coming broadband land grab. These customers are important both because they represent a disproportionate share of the value and because they are bell weathers for mass-market users.

away from the dominated product.²¹³ Several characteristics of Broadband Internet access are conducive to the first mover advantage, or "lock-in".

The local telephone companies have outlined a series of concerns about lock in.²¹⁴ First, high-speed access is a unique product. The Department of Justice determined that the broadband Internet market is a separate and distinct market from the narrowband Internet market.²¹⁵ Once this economic fact is accepted, the severe concentration in the broadband market – resulting in a high degree of market power – and the blatantly anti-competitive effect of the exclusionary tactics of the dominant broadband firms, become apparent.²¹⁶

The local telephone company experts devote a great deal of attention to demonstrating that the broadband market is a distinct market.²¹⁷ There is no doubt that "high-speed seems to be a distinctive product, making it a credible wedge for cable to sell a broader bundle."²¹⁸ For the Wall Street analysts, bundling seems to be the central marketing strategy for broadband.²¹⁹

Id.

AT&T Canada notes that narrowband access facilities are not an adequate service substitute for broadband access facilities. The low bandwidth associated with these facilities can substantially degrade the quality of service that is provided to the end customer to the point where transmission reception of services is no longer possible.

Id.

^{213.} SHAPIRO & VARIAN, *supra* note 16.

^{214.} See Hausman et. al., supra note 152, at 164.

Due to the nature of network industries in general, the early leader in any broadband Internet access may enjoy a "lock-in" of customers and content providers – that is, given the high switching costs for consumers associated with changing broadband provider (for example, the cost of a DSL modem and installation costs), an existing customer would be less sensitive to an increase in price than would a prospective customer.

^{215.} Amended Complaint of the Dep't of Justice at 6, U.S. v. AT&T Corp., 2000 WL 1752108 (D.C. Cir. 2000) (No. 1:00CV01176), *available at* http://www.usdoj.gov/atr/ cases/indx4468.htm.

^{216.} AT&T Canada, supra note 156, at 12.

^{217.} See generally Hausman et. al., supra note 152, at 136-48.

^{218.} Bernstein, supra note 160, at 8.

^{219.} See Goldman Sachs, supra note 160, at 14, 17.

AOL Time Warner is uniquely positioned against its competitors from both technology and media perspectives to make the interactive opportunity a reality. This multiplatform scale is particularly important from a pricing perspective, since it will permit the new company to offer more compelling and cost effective pricing bundles and options than its competitors. Furthermore, AOL Time Warner will benefit from a wider global footprint than its competitors" "...[W]e believe the real value by consumers en masse will be not in the "broadband connection" per se, but rather an attractively packaged, priced, and easy-to-use service that will bundle broadband content as an integral part of the service.

Second, there are significant switching costs that will hinder competition. The equipment (modems) and other front-end costs are still substantial and unique to each technology. There is very little competition between cable companies (i.e. overbuilding). Thus, switching costs remain a substantial barrier to competition. Combining a head start with significant switching costs raises the fear among the independent ISPs that consumers will be locked in. In Canada, AT&T argued that the presence of switching costs could impede the ability of consumers to change technologies, thereby impeding competition.²²⁰

The emerging model for closed communications platforms is one in which the facility owner with a dominant technology that is a critical input for service delivery can leverage control of transmission facilities to achieve domination of content services. With proprietary control over the network for which there is a lack of adequate alternatives, they can lock in consumers and squeeze competitors out of the broader market. Lock-in occurs because the high-speed access is a distinct market for a product with significant switching costs.

D. The Strategies of Dominant Players at Other Layers

The centrality of leveraging facilities is underscored by the war to control (or not allow a rival to control) cable wires by companies whose core strategic competences lie at other layers of the platform. Neither the dominant content company, AOL, nor the dominant code company, Microsoft, can sit by and watch the wires get snapped up; nor will either invest in building a competitive network. Since head-to-head competition is non-existent, foreclosure becomes the only strategy.

AOL is fighting several battles to preserve the closed nature of its interfaces for content and code products (instant messaging, keyword functions) and has been embroiled in a dispute about upgrades that undermines the interoperability of competing services.²²¹ Closed

Id.

^{220.} AT&T Canada, supra note 156, at 12.

The cost of switching suppliers is another important factor which is used to assess demand conditions in the relevant market. In the case of the broadband access market, the cost of switching suppliers could be significant, particularly if there is a need to adopt different technical interfaces or to purchase new terminal equipment for the home or office. Given the fact that many of the technologies involved in the provision of broadband access services are still in the early stages of development, it is unlikely that we will see customer switching seamlessly form one service provider to another in the near-term.

^{221.} The FCC order approving the AOL-Time Warner merger recognizes the instant messaging dispute, requiring AOL to render its service interoperable before it can provide enhanced instant messaging. *See* Applications for Consent to the Transfer of Control of Licenses & Section 214 Authorization by Time Warner Inc. & America Online, Inc.,

proprietary or non-portable products such as e-mail, instant messaging, buddy lists, calendar management, and keyword search engines, have become the basic utilities of Internet communications and usage. Consumers hesitate to give these up, since changing ISPs comes with significant switching costs, such as significant changes in identification (e-mail address), cutting the consumer off from communities of interest (instant messaging and buddy lists), and significant learning costs (new keyword searches and calendar management routines).

These interfaces are the sticky features that glue the customer to the service provider, but sticky features are not enough. After supporting open access, AOL determined it could not endure a world with closed cable wires.²²² It changed course and has tried to become the largest cable company in the country. Dominant in content and reaching back into code with proprietary standards, AOL still needed physical access. It could not leave its fate to a closed communications physical platform it did not own.

Microsoft's rollout of its new operating system and bundled services (Windows XP and .NET) follows a similar course at the code layer, and is a repeat of its strategy to preserve its operating system leverage from the browser wars.²²³ Microsoft's own description of the "Windows XP/.NET" strategy leaves no doubt that this is what its new bundle does.²²⁴ Microsoft declares this set of software programs and services as "the next generation of the Windows desktop platforms. An operating system for the internet...with one infrastructure for developing for it."²²⁵ The bundle is built on commingled code,²²⁶ proprietary languages,²²⁷ and

Transferors, to AOL Time Warner Inc., Transferee, *Memorandum Opinion and Order*, 16 F.C.C.R. 6547 (2001).

^{222.} Mark Cooper, Who Do You Trust? AOL and AT&T... When They Challenge The Cable Monopoly or AOL and AT&T.... When They Become The Cable Monopoly? (2000)

^{223.} Consumer Federation of America, Competitive Processes, Anticompetitive Practices and Consumer Harm in the Software Industry: An Analysis of the Inadequacies of the Microsoft-Dep't of Justice Proposed Final Judgment, (Jan. 23, 2002) in United States of America v Microsoft, no. 98-1232 (Tunney Act comments of Consumer Federation of America et. al., Appendix A).

^{224.} Dominic Gates and Mark Boslet, *The Redmond Menace*, THE INDUSTRY STANDARD, Apr. 30, 2001, *at* http://www.thestandard.com/article/0,1902,23797,00.html.

^{225.} Maggie Holland, *Microsoft Users Face .NET Lock-In*, COMPUTING, Mar. 22, 2001; *Web Services, an Interview with Robert Hess*, March 19, 2001.

^{226.} The distinction between technological bundling and contractual bundling presents complex analytic questions that provided some of the most dramatic courtroom incidents as various experts sparred over how code could be removed and what impact that would have on the functionality. See JOHN HEILEMANN, PRIDE BEFORE THE FALL 181-86 (2001). See generally The Project to Promote Competition and Innovation in the Digital Age, Microsoft's Expanding Monopolies: Casting a Wider .NET (2001) (alleging a great deal of commingling of code), at http://www.procompetition.org/headlines/051501Overview.html; The Project to Promote Competition and Innovation in the Digital Age, Windows

exclusive functionalities²²⁸ that are promoted by restrictive licenses,²²⁹ refusal to support competing applications,²³⁰ embedded links,²³¹ and deceptive messages.²³² Microsoft aims to control communications²³³ as

well through proprietary e-mail and messaging technology,²³⁴ and by

229. At a minimum, the restrictive licenses are the subject of the dispute over placement of icons. See Dina Bass, Microsoft Requires PC Makers to Put MSN With Links, BLOOMBERG, July 27, 2001; Don Clark, Microsoft Broadens Rules on Icon Use for PC Makers, WALL ST. J., Aug. 9, 2001, at B9.

230. While Microsoft advances its run time environment, it has pulled back on support for competitors. See John Wilke & Don Clark, Microsoft Pulls Back Its Support for Java: New Windows XP System Won't Include Software Needed to Run Programs, WALL ST. J., July 18, 2001 at A3.; Lee Copeland, Sun Lashes Out at Microsoft for Javaless Windows XP, COMPUTERWORLD, Aug. 27, 2001 at 22.

231. See Consumer Federation of America, supra note 223, at 59; Bass, supra note 229.

232. Electronic Privacy Information Center, *Complaint and Request for Injunction, Request for Investigation and for Other Relief*, July 26, 2001, *available at* http://www.epic.org/privacy/consumer/MS_complaint.pdf.

233. Charles Cooper, Allchin Bangs the Drum for XP, ZDNET NEWS, Aug. 29, 2001, at http://zdnet.com.com/2100-1104-530605.html.

I want to talk about what's in Windows XP and what it talks to on the back end. There are meta-Internet services we talk about which we consider to be pretty fundamental, architecturally, for building and making the Internet a little easier for people to use. Authentication and presence – in the future, we may have others – both those two, for the present, are core. And we're trying to support both of those in Windows XP.

Id.

There's also a dark side to Office XP. Microsoft is planning to try to sell a wide variety of Web-based services, and this new version of Office is partly designed to help the company peddle them . . . Not only that, but many of these Web enabled services enabled by Smart Tags will likely require you to sign in with a Microsoft-owned authentication system called Passport.

Walter Mossberg, New Microsoft Office Has Nice Additions, But There's a Hitch, WALL ST. J., May 17, 2001, at B1.

234. See John Markoff, *Microsoft is Ready to Supply a Phone in Every Computer*, N.Y. TIMES, June 12, 2001, at A1.

The real value of instant messaging lies not in the advertising potential of the platform, but in the strategic connection to Web services. Microsoft's Web services foundation, code named Hailstorm, will enhance instant messaging with Web services, most importantly, private identity tools to enable instant commerce, such as stock trading, purchasing and even corporate procurement in real time.

Press Release, Gartner, Inc., Gartner Examines Microsoft Versus America Online Impending War in Instant Messaging and Web Services Space, AOL Has Eyeballs and Marketing Edge,

XP, Passport, and the Emerging World of Distributed Applications, (2001) (commingling of code appears to be supported by the journalistic discussion of embedded applications), *at* http://www.procompetition.org/headlines/WhitePaper6_21.pdf.

^{227.} Microsoft's proprietary run time environment pervades Windows XP and its browsers. *See* MICROSOFT, RUNTIME HOSTS, MICROSOFT .NET FRAMEWORK DEVELOPERS GUIDE, 2001, *available at* http://msdn.microsoft.com/library/default.asp?url=/library/en-us/cpguide/html/cpconruntimehosts.asp.

^{228.} See John Markoff, A Growing Rivalry Derails AOL Talks For Microsoft Deal, N.Y. TIMES, June 18, 2001, at A1 (talks end after AOL officials said they could not agree to Microsoft's demand for effective exclusivity of its music software).

leveraging its existing monopoly to provide a new platform for a wide range of new applications.²³⁵ The goal is to capture the consumer and vendor interfaces for the next generation of computing, and to drive its proprietary languages into the interface between vendors and the Internet,²³⁶ frustrating potential competition from Internet,²³⁷ or distributed computing.²³⁸

Similar to AOL's concerns, Microsoft simply could not allow AOL to capture a dominant position in the physical layer. It backed the bids of all the other suitors for AT&T Broadband.²³⁹ With Microsoft's dominance in the code layer, coupled with its current reaching up into the content layer, it still could not allow physical access to be dominated by a rival in services. Hence follows a conclusion that conduct by dominant firms at other layers stresses the importance of the physical layer, and the threat that the effect of a monopoly at this level would have across the others.

Microsoft has the Vision and Technology (May 1, 2001), *at* http://www3.gartner.com/ 5_about/press_room/pr20010501a.html.

^{235.} See Jon Fortt, Battle Rages for Future of Internet Messaging, SAN JOSE MERCURY NEWS, Jan. 13, 2001, at 1C. (quoting Bob Visse, Project Manager for Microsoft Network, "The way I look at instant messaging is, it is a platform for all these different types of rich communications. I consider it very critical.").

^{236.} See Cooper, supra note 233 (quoting Microsoft President and CEO, Steve Ballmer, "We are taking elements of the user interface and programming model, and nicely and tightly integrating them, first into the client, and then into the server"); see also Mary Jo Foley, *Microsoft's .NET: Integration to the Max*, ZDNET NEWS, June 22, 2000, at http://www.zdnet.com/windows/stories/main/0,4728,2592779,00.html.

^{237.} See Paul Thurrott, Microsoft Responds: Win2K is the Cornerstone of .NET, WINDOWS 2000 MAGAZINE, Nov. 7, 2000, at http://www.win2000mag.com/Articles/ Index.cfm?ArticleID=16068 (quoting Microsoft Director of Marketing for the Windows .NET server group, Mark Parry, "The role that the Windows platform played in the past and the role it plays in the future is absolutely the same. Today, we have a world of applications and Web sites, and we think of those as two different worlds. With .NET, they become one.").

^{238.} See Consumer Federation of America, *supra* note 223, at 59; John Fontana, *Deciphering Microsoft's .Net Puzzle*, NETWORK WORLD, Apr. 16, 2001, *available at* http://www.nwfusion.com/news/2001/0416dotnet.html. ("Microsoft is shooting for the same degree of dominance in Web computing that it had in the client/server model.").

^{239.} Ariz. Consumers Council, et. al., Application for Consent to the Transfer of Control of Licenses, Comcast Corp. & AT&T Corp., Transferors to AT&T Comcast Corp., Transferee, Federal Communications Commission, *Petition to Deny*, Docket NO. MB 02-70, Apr. 29, 2002, p. 25.

VI. THE HISTORY OF ANTICOMPETITIVE DISCRIMINATORY BEHAVIOR AMONG CLOSED PLATFORMS

A. The Anticompetitive Track Record of Cable

Defenders of closed platforms frequently argue that it is too early to conclude that these platforms will be anticompetitive. The history of the cable industry, as a closed platform, is directly relevant to this argument.²⁴⁰ Cable fought hard to be exempted from requirements for nondiscriminatory carriage for video, and it has exploited that exemption with great vigor. There is nothing in the history of the past two decades to suggest that firms will voluntarily submit to the open platform model. Indeed, the anticompetitive conduct of the cable industry was so blatant that Congress stepped back in to reintroduce various requirements for nondiscrimination and restraints on market power less than a decade after the industry was deregulated.²⁴¹

While those requirements are often flaunted, every loophole exploited to prevent competition and nondiscriminatory access serves to show just how important active regulation is to maintain an open and competitive market.

1. Lack of Head-to-Head Competition

Almost two decades after deregulation, the market share of cable operators in their core product and geographic markets is still approximately 85 percent.²⁴² While the cable companies complain about being prevented from buying up more TV eyeballs, they have not seriously considered entering new markets by building new systems, which they have been allowed to do for decades. They never compete head-to-head.²⁴³ They operate on a monopoly model that frustrates competition. Over the past several years, the (soon to be) largest cable

^{240.} Implementation of Section 11 of the Cable Television Consumer Prot and Competition Act of 1992; Implementation of Cable Act Reform Provisions of the Telecomms. Act of 1996; The Comm'ns Cable Horizontal and Vertical Ownership Limits and Attribution Rules; Review of the Comm'ns Regulations Governing Attribution of Broadcast and Cable MDS Interests; Review of the Comm'ns Regulations and Policies Affecting Investment in the Broadcast Indus.; Reexamination of the Commission's Cross-Interest Policy, *Further Notice of Proposed Rulemaking*, 16 F.C.C.R. 17312 (2001).

^{241.} Cable Television Consumer Protection and Competition Act of 1992, Pub. L. No. 102-385, §2, 106 Stat. 1460 (1992).

^{242.} About 40 percent of satellite subscribers are located in areas not served by cable. See Mark Cooper, *The Failure of Intermodal' Competition in Cable Markets, available at* http://consumer.fed.org (Apr. 2002).

^{243.} See Mark Cooper, (Statement of Dr. Mark N. Cooper) Roundtable on FCC Ownership Policies, Roundtable On FCC Ownership Policies, available at http://www.fcc.gov/ownership/roundtable_docs/cooper-stmt.pdf (Oct. 29, 2001).

company frustrated the entry of a head-to-head competitor into its most important market, and led the industry in denying access to crown jewel sports programming.²⁴⁴

Contrary to the central premise of the Internet, that physical place does not matter, cable owners are aggressively clustering systems to create local leverage, which they exploit by raising prices²⁴⁵ and impairing competition.²⁴⁶ Physical place did not matter on the Internet because policy did not allow the owner of the local facility to make it matter.

Entry from outside of each player's entrenched industry is not expected; the most likely entrants have demonstrated that it will not occur. While the Baby Bells complain about not being allowed into long distance, or of being forced to keep their wires open, they have never seriously tried to enter long distance outside of their service territories. They have not used their own proprietary networks to deliver video. They have all but abandoned overbuilding cable networks. They have been allowed to engage in all of these clearly competitive activities, at least since the passage of the 1996 Telecommunications Act- but competition is not what these industries are about.

The cable industry has engaged in the opposite of penetration pricing, with substantial price increases early in the adoption cycle.²⁴⁷ Its policies on the use of its network are clearly intended to prevent the cannibalization of its monopoly product by preventing streaming video from competing over their wires.²⁴⁸ Of equal importance, these restrictions on use short circuit the critical flow of the Internet. The closure of the platform can undermine competition at other layers.²⁴⁹

Id.

^{244.} Comcast vigorously opposed RCN in Philadelphia while it shifted the distribution of local sports teams programming (which it owns) to terrestrial distribution to avoid the requirement under the Cable Consumer Protection Act of 1992 to provide nondiscriminatory access to programming.

^{245.} Recent FCC statistics show a very strong trend to clustering. Contrary to claims of "efficiency" gains in clusters, which should lead to lower prices, the FCC finds higher prices.

^{246.} Cable operators have begun avoiding the obligation to make access to content (especially sports programming) available by distributing it terrestrially.

^{247.} See Spangler, supra note 137, at 97.
248. See Weiser, supra note 5, at 15-16.

Significantly, the history of AT&T highlights how dominant providers in tipped markets have not shied away from denying interconnection (or compatibility) to rivals seeking to provide an alternate product. Perhaps more pernicious to innovation, a company in control of a dominant standard may block the development or deployment of enhanced products that threaten to siphon users from the original product, for fear that such products will "cannibalize" the company's installed base.

^{249.} AT&T rejected the notion that competition for narrowband Internet service is sufficient to discipline the behavior of vertically integrated broadband Internet companies and it expressed the concern that leveraging facilities in the broadband market might damage competition in the whole content market:

Instead, the contrary has occurred. A ubiquitous open standard is being Balkanized by leveraging the existing monopoly base of customers from a neighboring market through exclusion and product bundling. The track record in the cable industry bears little resemblance to a pro-competitive standards war.²⁵⁰

2. Defending and Expanding the Monopoly Core

The first effect of allowing facility owners to exercise their market power in the high speed Internet sector is a vigorous defensive stance relative to their core monopoly. AOL saw this as the first outcome of the failure to ensure open communications platforms.²⁵¹

Experts for the local telephone companies pointed out that the control over streaming video was part of a clear pattern of frustrating competition for the core monopoly service.²⁵² Cable companies abused their market power over coaxial cable to prevent streaming video from competing against their core monopoly cable TV service.²⁵³

AT&T Canada, supra note 156, at 17.

252. See Hausman et al., supra note 152, at 133.

As noted above, even though the market for Internet access service generally demonstrates a high degree of competition (with the exception of co-axial cable Internet access services), the potential exists for providers who also control the underlying access to undermine the continuation of such competition. Accordingly, AT&T Canada LDS submits that safeguards against anti-competitive behaviour should be applied to the provision of information service by those broadcast or telecommunications carriers who own and operate broadband access networks

Thus, in evaluating whether a regulator should mandate a standard, antitrust enforcers should allow a joint venture or patent pool to facilitate a compatible standard, or intellectual property law should facilitate horizontal compatibility through a reverse engineering right, it is critical to recognize that an early adoption or imposition of horizontal compatibility can thwart critical innovation and competition.

Weiser, *supra* note 5, at 16.

^{251.} AOL, FCC, supra, note 157.

^{253.} Id.

AT&T's acquisition of MediaOne [represented] a traditional cable strategy of controlling alternative source of delivery for video programming. Before AT&T's recent cable acquisition initiative, the most recent implementation of this anticompetitive strategy was the attempt by a coalition of cable firms to control satellite delivery of video programming, the first alternative medium for multichannel video programming. The acquisition of MediaOne will allow AT&T to control broadband Internet delivery of video programming, the second alternative medium for multichannel video programming. Even AT&T's own economic experts admit that "Internet video streaming clearly competes, at a minimum, with video programming offered by cable systems, satellite companies, and television broadcasters.

Wall Street analysts have tended to agree. A key source of market power on the supply-side is vertical integration.²⁵⁴ To the extent that any cable operators have voluntarily negotiated with unaffiliated ISPs, they have insisted on such extremely high charges for access that it is impossible for competitors to effectively enter the market.²⁵⁵

In conclusion, we should not expect firms to cross compete based upon their past behavior. We should focus on the discriminatory practices they employ in their own arenas and extrapolate to their current conduct to show how, even though the medium may be changing, their anticompetitive behavior remains predictable.

B. Discriminatory Practices in the Cable Video Market

1. Conduit Discrimination

Examples of anti-competitive practices litter the cable industry landscape. These include exclusive deals with independents that freezeout overbuilders,²⁵⁶ refusals to deal for programming (permitted by loopholes in the law requiring non-discriminatory access to programming),²⁵⁷ tying arrangements,²⁵⁸ and denial of access to facili-

^{254.} See Merrill Lynch, supra note 160, at 10-11.

For example, over the next several years, cable assets are likely to be critical to the development of both broadband PC-based Internet services such as music downloading and streaming audio and video, as well as interactive television. As an owner of major cable assets *and* content assets, AOL Time Warner will be in an excellent position to drive the development of new services.

Above and beyond content and distribution, however, we believe that the key competitive advantage the company will gain in the current market environment will stem from owning both the content and the distribution at this critical point in time. Specifically, we believe that by owning both offline content and an online platform, as well as online content and an offline platform, the company is in a better position than either entity is separately to drive the evolution of interactive services to the next level – breaking the convergence logjams that, in many sectors of the media and communications industries, are inhibiting the growth of the medium.

Id. (emphasis in the original).

^{255.} See Northnet, supra note 161.

^{256.} Before House Subcomm. on Telecommunications, Trade and Consumer Protection, Comm. on Commerce, 105th Cong. 4 (July 29, 1997) (testimony of William Redderson on Behalf of Bell South Enterprises) (citing examples of suspected exclusive arrangements involving Eye on People, MSNBC, Viacom, and Fox) [hereinafter Bell South]; Before House Subcomm. on Telecommunications, Trade and Consumer Protection, Comm. on Commerce, 105th Cong. 7 (July 29, 1997) [hereinafter Ameritech] (testimony of Deborah L. Lenart, President Ameritech New Media, Inc.).

^{257.} The loophole will be terrestrial transmission to regional clusters, thereby avoiding the requirement to provide non-discriminatory access to satellite delivered programming. Bell South gives examples of Comcast in Philadelphia and Time Warner in Orlando. *BellSouth, supra* note 256, at 5. Ameritech cites Cablevision in New York. *Ameritech, supra* note 256, at 8.

ties.²⁵⁹ Overbuilders faced vigorous efforts to prevent competition through exclusion from access to programming and regulatory tactics of incumbent cable operators.²⁶⁰ Exclusive arrangements prevent competing technologies from obtaining programming, as well as preventing competition from developing within the cable industry.²⁶¹

A specific example of conduit discrimination is the denial of access to vertically integrated programming. Comcast and Cablevision have shifted some sports programming to terrestrial delivery, thereby avoiding the open access requirement of the 1992 statute.²⁶² As cable operators become larger and more clustered, this strategy will become increasingly attractive to them. Specific areas where such programming has been denied are Phoenix, Kansas, Philadelphia and New York.²⁶³ The denial of access to marquis sport programming can have a devastating effect; satellite providers in markets where foreclosure has occurred achieve a market penetration only one-quarter of the national average.²⁶⁴

Integrated Multichannel System Operators (MSOs) wield immense power against smaller cable companies, exploiting loopholes in the

^{258.} Bell South gives examples including NBC/CNBC, Scripps Howard/Home and Garden. *BellSouth, supra* note 256, at 5.

^{259.} See Before House Subcomm. on Telecommunications, Trade & Consumer Protection, Comm. on Commerce, 105th Cong. (July 29, 1997) (testimony of Michael J. Mahoney on behalf of C TEC Corp.).

^{260.} See RCN Telecom Service of New York, Inc. v. Cablevision Corp., et. al, FCC Doc. No. 01-127 (2001); DIRECTV Inc. v. Comcast, Corp, et al, 13 F.C.C.R. 21,822, 21,834 (1998); EchoStar Communications Corp. v. Comcast Corp. et al, 14 F.C.C.R. 2089, 2099 (1999). Problems can also occur on an event-by-event basis. See Implementation of the Cable Television Consumer Protection and Competition Act of 1992, Development of Competition & Diversity in Video Programming Distribution: Section 628 (c)(5) of the Communications Act: Sunset of Exclusive Contract Prohibition, FCC Doc. No. 01-290 at 4 (Dec. 3, 2001), at http://www.ncta.com/pdf_files/ReplyComCS01-290.pdf (comments by Everest Midwest Licensee LLC dba Everest Connections Corp.) [hereinafter Everest]; In the Matter of Implementation of the Cable Television Consumer Protection & Competition Act of 1992, Development of Competition & Diversity in Video Programming Distribution: Section 628 (c)(5) of the Communications Act: Sunset of Exclusive Contract Prohibition, FCC Doc. No. 01-290 at 3 (Dec. 3, 2001) (comments of Gemini Networks, Inc.).

^{261.} HBO, a subsidiary of Time, played a key role in the effort to prevent TVRO operators from obtaining programming (see Sylvia Chan-Olmstead, and Barry R. Litman, "Antitrust and Horizontal Mergers in the Cable Industry," J. OF MEDIA ECON. 11 (1988), and the effort to sell overbuild insurance *Competitive Issues in the Cable Television on Industry, Subcomm. on Antitrust, Monopolies and Business Rights, Comm. on the Judiciary,* U. S. Cong., March 17, 1988, at 127, 152-74 [hereinafter *Competitive Issues*]. The current efforts to impose exclusive arrangements have raised numerous complaints from potential competitors. *See Bell South, supra* note 256; *Ameritech, supra* note 256.

^{262.} COOPER, CABLE MERGERS, supra note 76, at 48-49.

^{263.} Id.

^{264.} See Implementation of the Cable Television Consumer Protection & Competition Act of 1992, Development of Competition and Diversity in Video Programming Distribution: Section 628 (c)(5) of the Communications Act: Sunset of Exclusive Contract Prohibition, FCC Doc. No. 01-290 at 14 (Dec. 3, 2001) [hereinafter Joint Comments], at http://www.wcai.com/pdf/2002/fccJan7.pdf.

program access rules.²⁶⁵ For the smaller entities, the current refusals to deal are not limited to sports programming. Other services have been denied, such as video on demand.²⁶⁶

Where the large MSOs do not have direct ownership of video services, they have obtained exclusive arrangements, thereby denying competitors and potential competitors access to programming.²⁶⁷ The exclusionary tactics apply not only to head-to-head cable operators and satellite providers, but also to DSL-based providers seeking to put together a package of voice, video, and data products.²⁶⁸

Because the dominant MSOs are so large, they can influence important programmers not to sell to competitors and potential competitors. All of the Baby Bells, in addition to others, have complained about denial of access to programming to support their entry into the cable TV industry.²⁶⁹ Small cable operators observe the same problem.²⁷⁰

One of the more dynamic negative effects of discrimination is the potential to devalue competitors, either driving them out of business or making them attractive takeover targets.²⁷¹ This would also be a dynamic benefit to the content provided by the affiliated supplier.²⁷²

Id. 271. *Id.* at 14.

^{265.} See ACA, supra note 162, at 15 - 16. "The incentives to deny programming and the consequences to program diversity are not hypothetical. In circumstances outside of Section 628(c)(2)(D), these incentives are already resulting in denial of programming to small cable companies." See also Implementation of the Cable Television Consumer Protection and Competition Act of 1992, Development of Competition and Diversity in Video Programming Distribution: Section 628 (c)(5) of the Communications Act: Sunset of Exclusive Contract Prohibition, FCC Doc. No. 01-290 at 14 (Dec. 3, 2001) (comments of Braintree Electric Light Department) (discussing the possible results of satellite companies' withholding programming), available at http://www.ncta.com/pdf_files/ReplyComCS01-290.pdf.

^{266.} See Everest, supra note 260, at 6; Implementation of the Cable Television Consumer Protection & Competition Act of 1992, Development of Competition and Diversity in Video Programming Distribution: Section 628 (c)(5) of the Communications Act: Sunset of Exclusive Contract Prohibition, FCC Doc. No. 01-290 at 4 (Dec. 3, 2001) [hereinafter Qwest] (comments of Qwest Broadband Services, Inc), available at http://ntca.org/leg_reg/filings/CS01-290.pdf.

^{267.} See Everest, supra note 260, at 6 (using a different example).

^{268.} Cf. Joint Comments, CS Docket No. 01-290.

^{269.} See Bell South, supra note 256; Ameritech, supra note 256.

^{270.} See ACA, supra note 162, at 13.

Vertically integrated programming providers will have an incentive to enter into regional or national exclusive programming contracts aimed at DBS competitors.

To gain a competitive advantage over EchoStar/DirecTV, owners of vertically integrated programming will likely enter into exclusive programming contracts with preferred regional or national MSOs, both affiliated and non-affiliated. The most efficient and valuable basis to grant exclusivity will be on a regional or national basis, rather than on a franchise-by-franchise basis.

Vertically integrated programming providers will have an incentive to deny programming to small cable companies that are competitors.

2. Content Discrimination

Integrated MSOs have a long history of granting preferential access to subscribers for affiliated programmers and denying access to those who are not affiliated. Evidence of these problems is both qualitative and quantitative.²⁷³ Other examples of anticompetitive conduct include efforts to impose or obtain exclusive arrangements, price discrimination, and "dial disadvantage."²⁷⁴ One of the more prominent examples was summarized in the recent program access proceeding.²⁷⁵

Id.

275. Joint Comments, supra note 264, at 7-10.

It is well known, for example, that News Corp. abandoned its 1997 joint venture with DBS operator EchoStar Communications Corporation (EchoStar) after incumbent cable operators responded to the transaction by refusing to discuss carriage of Fox cable programming. Unwilling to put the financial viability of Fox's programming at risk, News Corp. took the path of least resistance, left Echostar at

In competitive situations, owners of vertically integrated programming have a powerful incentive to deny programming to small cable companies. A handful of ACA members already have service areas that overlap those of some major MSOs. Because of the expansion of MSO facilities and the expansion of independent cable systems, competition between MSO's and ACA members will likely increase. By offering exclusive programming, an MSO will gain an overwhelming competitive advantage over an independent cable operator. As discussed above, the MSO will gain subscribers and monthly revenues worth far more than any license fees lost (or higher license fees paid) through exclusive distribution arrangements.

Vertically integrated programming providers will have an incentive to deny programming to acquisition targets...

Many ACA members own cable systems adjacent to systems owned by major MSOs. A common transaction in the industry, and an important exit strategy for smaller systems, is the sale of a system to a major MSO. As in any acquisition, the buyer has an incentive to obtain the system at the lowest price.

Cable systems are generally valued on revenues or cash flow, with the subscriber base being a key factor in those measures. By denying access to programming, an owner of vertically integrated programming could readily decrease the revenues and subscriber base of a small acquisition target. The MSO buyer could then acquire the system at a deflated price. A less obvious exercise of market power would occur in the context of sale negotiations, where the threat of denial of program access could force price concessions.

^{272.} *Id.* at 12,149-50. The cable-affiliated programmer will probably win in these transactions as well. The competitive advantage from exclusive distribution rights will increase MSO demand for exclusive programming deals, supporting higher license fees. The increased license fees will offset, and probably exceed, loss of revenues from excluded distributors. In this way, vertically integrated programmers can also gain from exclusivity.

^{273.} See Hoedyun Ahn & Barry R. Litman, Vertical Integration and Consumer Welfare in the Cable Industry, 41(4) J. BROADCASTING & ELECTRONIC MEDIA, 231-40 (1997).

^{274.} A comprehensive catologue of practices is provided in *Competitive Issues, supra* note 261. More recently, for example, The Time Warner-Turner merger as originally proposed included preferential treatment for TCI. *See Separate Statement of Chairman Pitofsky and Commissioners Steiger and Varney,* In the Matter of Time Warner, Inc., FTC File No. 961-0004, *at* http://www.ftc.gov/os/1996/9609/twother.htm.

As Qwest points out, the problem is not simply one of complete exclusion.²⁷⁶ Dominant, vertically-integrated MSOs can inflict discriminatory or excessively burdensome terms and conditions of programming distribution.²⁷⁷ The dominant, integrated firms get the best deals. For example, large MSOs often secure "most favored nation" clauses from programmers. Such clauses are supposed to guarantee an MSO as good a price for programming as any other operator, sometimes excluding Time Warner and TCI.²⁷⁸ In the case of Fox, noted above, programmers who did not have an investment in the country's then largest MSO suffered. "To make room (for Fox News), Malone cleared out existing networks like a bowling ball cracking into the tenpin. The arrival of Fox News in Denver pushed Court TV to split the programming day with Spice, a pay-per-view sex network." ²⁷⁹

Recent comments in the program access proceeding²⁸⁰ point to an even more stark demonstration of the power of cable to engage in content discrimination. These comments point out that the "retransmission consent process has provided even more evidence of the economic power that incumbent cable operators hold over programming services, even those owned by NBC, CBS and ABC."²⁸¹ Here, cable market power is evidenced not by pricing, but by the ability to deny content to competing conduit providers.²⁸²

276. See Qwest, supra note 266, at 3.

277. *Id.* at 2-3.

278. See John M. Higgins, Hangover from Takeovers, BROADCASTING & CABLE, Apr. 19, 1999.

NBC, for example, surrendered exclusivity for the MSNBC cable network to incumbent cable operators in exchange for carriage of NBC broadcast stations. Similarly, during retransmission consent negotiations for carriage of CBS stations, CBS surrendered exclusivity for its own news-oriented cable channel, Eye on People. [Also,] ABC surrendered exclusivity for the Soap net cable network to MSO Charter Communications in the Los Angeles market during retransmission

the altar and switched its affections to the cable-controlled PrimeStar DBS service. . .

It is also well known that Fox News Channel (FNC) owes its very existence to Telecommunications, Inc. (TCI) (since acquired by AT&T), whose agreement to carry FNC on systems serving 90% of TCI's subscribers was critical to the successful launch of the network. Not coincidentally, Fox made FNC available to incumbent cable operators on an exclusive basis. Like the saga of News Corp./EchoStar, FNC's launch and subsequent exclusivity to the cable MSOs is a case study of how the largest incumbent cable operators control the destiny of new programming services, and why programmers sell to cable's competitors at their own risk.

Id.

^{279.} STEPHEN KEATING, CUT THROAT: HIGH STAKES AND KILLER MOVES ON THE ELECTRONIC FRONTIER 18 (1999) (characterizing the incident as described in this paragraph).

^{280.} See Joint Comments, supra note 264.

^{281.} Id. at 9.

^{282.} Id. at 9-10.

Other large programmers have had similar problems, including such powerhouses as the BBC,²⁸³ Black Entertainment Television (BET), before it was acquired by Viacom,"²⁸⁴and Belo.²⁸⁵

Furthermore, small cable companies point out the clear incentive that large cable companies have to discriminate. They give examples of discrimination that takes place in spite of the program access rules, and make a strong case that larger entities have larger incentives to discriminate.²⁸⁶

Needless to say, AT&T refuses to accept the same public policy obligation to provide open access to the approximately 20 million cable homes that its cable wires pass. Examples of these two scenarios involve AT&T's control over its programming arm, HITS.²⁸⁷

The previous section identified a series of theoretical and conceptual arguments that rejected the claim that vertically integrated monopolies in information platforms should be presumed to be efficiency enhancing. By showing they could behave like abusive monopolists, the question of the performance of vertically integrated monopolies becomes an empirical one. By reviewing the behavior of cable monopolists, who now dominate both the video and the high speed Internet markets, this

Id.

287. Joint Comments, supra note 264, at 15.

consent negotiations for ABC broadcast stations. In other words, when confronted with dominance of the largest cable MSOs in local markets, NBC, CBS and ABC, like Fox, acquiesced to the MSOs' demand that they withhold their cable programming from competing distributors.

^{283.} See Heidi Przybyla, BBC Uses D.C. as Beachhead for American Invasion, WASHINGTON BUSINESS JOURNAL (July 17, 1998) (characterizing the incident described in this paragraph).

^{284.} Steve Donohue, *BET's Lee Searches for Viacom Synergies*, 22 MULTICHANNEL NEWS 3844, (Dec. 3, 2001).

^{285.} See R. Michelle Breyer, CNN-Style Channel Planned for Austin, AUSTIN-AMERICAN. STATESMAN, Aug. 22, 1998, at D1; New Cable Operation to Tex-ize the News, AUSTIN-AMERICAN STATESMAN, Jan. 1, 1999, at B2; Kim Tyson, Belo Adds KVUE to Texas TV Holdings, AUSTIN-AMERICAN-STATESMAN, Feb. 26, 1999, at A1 (characterizes the incident described in this paragraph); Dianne Holloway, TV's new motto: All the News That's Fit to Air—and Then Some, AUSTIN-AMERICAN STATESMAN, May 29, 2000, at E1; Heather Cocks, Time Warner Cable to Carry Belo's Texas News Channel, AUSTIN-AMERICAN STATESMAN, Sept. 26, 2000, at D1; Missy Turner, Local Cameras Will Roll on 24-hour News Channel, HOUS. BUS. J. (Apr. 27, 2001).

^{286.} See ACA, supra note 162; Joint Comments, supra note 264.

AT&T owns Headend in the Sky ("HITS"), a wholesale distributor of digital programming via satellite. HITS services have been instrumental in enabling many smaller systems to expand channel offerings through digital services, and ACA has been a prime supporter of this service. Among the digital services carried by HITS is TVLand, a popular entertainment channel. But of all the channels carried by HITS, ACA members cannot receive digital TVLand from HITS. AT&T apparently has a national exclusive contract for the service.

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241

section shows that the "monopoly is bad" view provides a much more plausible explanation. In both markets we observe the classic signs of monopoly abuse – aggressive actions to restrict competition and retard innovation, combined with rising prices and excess profits.

VII. CONCLUSION

A. Closed Communications Platforms

There is an eerie parallel between AT&T's hostile reaction to innovation as a telephone company confronted with the concept of building an Internet–like network, and AT&T's reaction as a cable company confronting the prospect of Internet-based video content; as demonstrated by AT&T's statements: "damned if we are going to allow the creation of a competitor to ourselves,"²⁸⁸ and "[W]e didn't spend \$56 billion on a cable network to have the blood sucked out of our veins."²⁸⁹

There is also a parallel between what AT&T and AOL argued about open communications platforms before they decided to buy cable wires, and what most non-owners of the wires continue to say. The key to understanding this situation is to watch what these firms are doing, not what their expert theoreticians say they could or should do.²⁹⁰ Further, these firms will not submit to openness on their own. The platform will remain closed until policymakers open it.

Decades of experience with closed cable networks, and the actual behavior of high-speed owners (and would be owners), undermines the claim that competition between a limited number of facilities owners will

^{288.} LESSIG, THE FUTURE OF IDEAS, supra note 13, at 32.

^{289.} Id. at 158.

^{290.} The analogy to the Microsoft antitrust case is clear. I have argued that this was the central theme in the Microsoft case. *See* Cooper, *Antitrust, supra* note 104, at 817-27.

Microsoft did not lose this case "by defending too much too often." It did not lose because of a remarkably inept defense, or because of allegation that crucial pieces of evidence were rigged, or because of an irrational or biased Judge. It lost because its acts were simply indefensible. The intent and effect of its behavior was so blatantly anti-competitive and the economic assumption necessary to excuse it so narrow and unrealistic, that not even a conservative judge – Ronald Reagan's first judicial [sic] nominee – could do anything but find Microsoft guilty by a reasonable interpretation of the antitrust rule. . .

Microsoft executives knew full well that each of the problems that Schmalensee/NERA $% \left(\mathcal{M}_{n}^{2}\right) =0$

[[]Microsoft experts] dismissed is actually a "huge" barrier. Through their words and deeds Microsoft's senior executives demonstrated that they believed the opposite of what the experts said and acted in exactly the opposite manner in the market. Microsoft's witnesses asked the court to disregard their words and deeds and believe that Microsoft executives did not understand their own market.

result in increased innovation and access. At the micro-level of business strategies, and the macro-level of market structure, these closed networks look and act a lot more like anticompetitive fortresses than dynamic combatants in a cross platform war.

Facilities in the physical layer are few, dumb, and slow compared to the code and content layers. Through four years of legislative, legal, and regulatory battling over the closure of high-speed transmission facilities, the claim has been that the proprietary interests of facility owners would lead them to open their networks voluntarily.²⁹¹ That simply has not happened to a significant degree. As an example to the contrary, those obligated to keep their networks open have gone to great lengths to frustrate competing ISPs from selling services to the public, and now they demand the right to close their networks. It is hard to imagine that these firms will make life easier for potential competitors, without required open access.

The closure of communications platforms is potent and persistent. This is caused by entities leveraging their scale and barriers to entry in the physical layer, along with the inherent characteristics of information production, the differentiation of information products, and the network effects captured by vertically integrated facility owners.

In the past, closed communications platform owners have failed to provide non-discriminatory access, in the present they are not doing so, and there is no credible reason to believe that they will do so in the future. If closed communications platforms are to be defended, they must be based on the claim that monopoly is better for consumers and the economy. That claim has been rightly and roundly rejected.²⁹²

B. Some Practical Suggestions

The enlightened form of common carrier regulation embodied in the Computer Inquiries took us a long way into the information age.²⁹³ There are no insurmountable technical obstacles to developing a similar

^{291.} See Speta, *supra* note 26.

^{292.} The Microsoft case again comes to mind. See Cooper, Antitrust, supra note 104, at 817-818. "Microsoft . . . asked the court to abandon its traditional view of competition and accept the proposition that markets will inevitably be dominated by very few, very large companies . . ." Evidence at trial revealed that precisely the opposite was true. Because the nature of the industry was not sufficient to entrench its monopoly, Microsoft resorted to repeated, well-documented and protracted campaigns of anti-competitive behaviors to squash the competition. If network externalities would have been sufficient to entrench Microsoft, the immense amount of managerial time and effort and the hundreds of millions, if not billions, of dollars burned up foreclosing the market to competing products was wasted.

^{293.} See BAKER, supra note 6, at 34-35; See also Benkler, From Consumers to Users, supra note 7 (Benkler notes that common carriage may be necessary under certain circumstances, but is not preferable).

set of rules for high-speed communications networks. Unfortunately, the FCC's current light-handed regulation is not enough.

One alternative is structural separation. Isolating the physical layer may be a reliable way to neutralize the strategic interest in discrimination.²⁹⁴ The moment the facility owners are let into the other layers, the trouble begins. A firm's economic interests compel it to exploit the market power that small numbers and barriers to entry inevitably confer.

Separating the ownership of facilities from code and content is a simple, content-neutral principle that provides an easily enforceable bright line test. Facility owners could be paid handsomely for the use of their facilities, but they must have no interest in the code or the content. The cost may be a king's ransom, but it will be worth it if code and content are liberated from the tyranny of closed facilities. Unfortunately, persuading policy makers to undertake divestiture is extremely difficult to sell, even though it is a better solution on policy grounds

Another option is the highway model – building a new transmission network that is not proprietary. This concept includes a publicly funded wire that can be compelled to be open.²⁹⁵ The analogy between the superhighways of the industrial age and the information superhighway of the Internet age is a strong one.²⁹⁶ With regulation, or even separation of ownership, there are always suspicions about side deals and hidden agendas. It is important to recognize that highways are neither free, nor free of substantial political wrangling and unintended consequences. Resistance will be great, as indicated by the outrage of some at the prospect of municipally owned dark fiber.²⁹⁷ Still, given the ability of road systems to resist privatization for centuries, this would likely be a viable long-term solution, if it could be brought into existence.

^{294.} See LESSIG, THE FUTURE OF IDEAS, supra note 13, at 166 ("Keeping the medium and the content separate is a good rule in most media. When I turn on the television, I don't expect it to deliberately jump to a particular channel, or to give a better picture when I choose a channel that has the 'right' commercials." (quoting Berners-Lee)). See also BAKER, supra note 6, at 296 ("[P]rohibiting enterprises that own and operate transmission facilities from also owning and marketing media content is a clean, structural solution that does not require constant regulatory monitoring and largely eliminates this incentive to block or burden outsider's expression. In many situations, this separation should be the preferred policy response.").

^{295.} See LESSIG, THE FUTURE OF IDEAS, supra note 13, at 244.

^{296.} The highway analogy draws the discussion squarely into the realm of the commons debate. Those arguing for closure are troubled by the prospect. *See* Weiser, *supra* note 5, at 18 (putting it "not protecting the user interface threatened to make the interface – and the community of users trained on the interface—a "common resource" in which no particular company would want to invest").

^{297.} Id.

A final alternative is to identify a space where transmission is not subject to property rights.²⁹⁸ The spectrum could be managed as a commons.²⁹⁹ This would work, but the inertia of public policy is running strongly in the opposite direction, with vigorous efforts to propertize as much of the spectrum as quickly as possible. As difficult as it was to free a little piece of an early twentieth century technology over the objections of incumbents (low power radio spectrum), it would be even more difficult to free a 21st century transmission medium.

Regardless of the political difficulty of opening the communications platform for the Internet age, there is no doubt that the economic and democratic benefits of true competition and enhanced civic discourse that flow from genuinely open communications platforms are well worth the effort.

^{298.} See LESSIG, THE FUTURE OF IDEAS, supra note 13, at 241-44.

^{299.} This is the proper way to frame the issue since it is important to recognize that commons are not unruly and neglected spaces and that these types of resources are far from uncommon (infrequent).

FCC'S BROADBAND QUARTET: A STATE-FEDERAL FUGUE OR FEUD?

REBECCA ARBOGAST*

The states care about broadband. California and Kentucky regulators have developed creative legal theories to extend their jurisdiction to regulate broadband services. The Colorado, Washington, and Michigan legislatures, among others, created incentive programs to promote broadband investment within their states. And municipalities themselves are getting into the business of providing broadband services where private companies are not serving their communities. Though not growing at the initially predicted rates, broadband use continues to grow steadily and impressively. In fact, little noticed over all the noise of the tech crash, broadband use quietly keeps growing, with cable and phone companies adding the most subscribers last year of any year ever.¹ Many states view the deployment of broadband networks as important to

^{*} Director of Communications Legal Analysis, Legg Mason. Some of the author's observations are based on experiences as the Chief of the International Telecommunications Division at the Federal Communications Commission. This article is based on a presentation made at the Silicon Flatirons Telecommunications Program Conference, February 2003. Thanks to Stuart Benjamin, Geoffrey Klineberg, and Philip Weiser for helpful comments.

^{1.} By most accounts, 2002 was a record year for broadband growth. Nick Wingfield, The Best Way to Surf at Top Speed – Rival Internet Services Step Up Broadband Deals; Does Cable Beat DSL?, WALL ST. J., Apr. 1, 2003, at D1 (reporting results of Leichtman Research Group). High-speed Internet lines, defined as greater than 200 kbs/sec in at least one direction, increased in homes and businesses by 55% in 2002. Federal Communications Commission Releases Data on High-Speed Services for Internet Access, 2003 FCC LEXIS 3272 (June 10, 2003). Though growing steadily, and now at around 15% of households, broadband adoption rates in the United States have fallen behind other countries including South Korea, Canada, and Sweden. Scott Woolley, FCC Ruling Pummels DSL Competitors, FORBES.COM, Feb. 20, 2003, at http://forbes.com/2003/02/20/cz_sw_0220 broadband.htm. Broadband Access for Business, Working Party on Telecommunication and Information Services Policies, ORGANIZATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (2002) DSTI/ICCP/TISP(2002)3/FINAL, Dec. 4, 2002, available at http://www.olis.oecd.org/olis/2002doc.nsf/LinkTo/dsti-iccp-tisp(2002)3-final; The Development of Broadband Access in OECD Countries, Working Party on Telecommunication and Information Services Policies, ORGANIZATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT DSTI/ICCP/TISP(2001)2/FINAL, Oct. 29, 2001, available at http://www.oecd.org/ dataoecd/48/33/2475737.pdf. Although record numbers are signing up for broadband, the rate of growth may be leveling off.

economic development, in part by linking thinly populated areas with the rest of the state and the world economy, and in part to promote locally based high tech sectors of the state economy. In addition, many states share with the federal government a recognition that broadband-based technologies still hold out one of the greatest hopes for economic growth. They also share a concern that we not fall behind in innovation in this area.

Today, states' power over broadband rests more on political pressure than on any clear reserved legal authority, because the Federal Communications Commission and Congress already largely have preempted much state jurisdiction, and courts largely have affirmed this. At the federal level, the FCC is moving toward removing regulations that impose various forms of access to broadband facilities and services. But nature abhors a vacuum, and it appears that as federal regulators back away, some states' regulators will try to find ways to retain or acquire some policymaking authority in this area. Their ability to do so will vary with the particular issue and depends in large part on the degree to which the FCC expressly preempts states' efforts. At the political level, states have been strikingly successful recently in obtaining a role in telecommunications regulation and even perhaps in the recent furor over Congressional response to the FCC's broadcast concentration. controversial relaxation of television and radio ownership rules certainly reflects a complicated policy and political calculus, but included in proposed legislation was a surprisingly greater role for states in reaction to the federal agency pulling back.² However, as this article analyzes, the courts are likely to strike down state agency efforts to regulate broadband in the face of express federal agency preemption.

Reflecting on the relationship between federalism and regulation of broadband brings to mind the comparison of Europe's and the United States' approach to regulation. There is an obvious, if imperfect, analogy between federalism in the United States and the European Union, with the relationship between the FCC and state regulators similar in some respects to that between the European Commission and the European Member State regulators. In 1999 and 2000, based on my meetings with European Union and Member State government officials, it was clear that they were concerned with catching up with the United States in Internet development and broadband deployment. The individual

^{2.} Senator Stevens proposed an amendment to proposed legislation to roll back FCC deregulation of broadcast-newspaper ownership that would grant state agencies authority to review and make recommendations to the FCC regarding proposed newspaper-broadcast deals in the smaller markets. Preservation of Localism, Program Diversity, and Competition in Television Broadcast Service Act of 2003, S. 1046, 108th Cong., Senate Commerce Committee (2003).

country regulators were promoting infrastructure development by giving the incumbent carriers a head start to develop and invest in broadband, with the theory that only incumbents would invest and even they would not if they had to share their facilities. Competitive carriers looked to Brussels for help. Jumping forward in time, there is currently a deregulatory agenda in Washington, and the FCC is saying many of the same things about the need to give incumbents the room to invest. Competitors are now turning to state regulators for help. It is ironic. Or inevitable. Or both.

In Part I of this article, I outline four FCC proceedings that present the agency with the opportunity to fundamentally reshape the regulatory approach to broadband. In addition, I analyze the likelihood that the FCC's preemption of a state role in regulating broadband facilities and services will be upheld by the courts. In the "Triennial Review Order," the Commission determined which elements of the incumbent telephone companies' network, including those making up broadband transmission, the incumbents must make available to competitive local carriers.³ In a pair of classification proceedings, the Commission is determining what statutory category to apply to cable and wireline residential broadband services and what regulatory obligations to impose.⁴ Currently, the provision of broadband Internet access is regulated very differently depending on whether it is provided by a cable company offering cable modem service or a telephone company offering high speed service over its copper lines to the home, and the FCC is considering whether this different regulatory regime is justified in the current environment. Finally, the FCC will rule on whether to continue to treat incumbents as dominant in their provision of advanced services.⁵ Although the FCC has not identified it as part of the broadband quartet, another set of proceedings addressing the regulatory treatment of Internet telephony using the Voice Over Internet Protocol ("VOIP") will also play an important role in determining the longer term regulatory landscape for communications.

^{3.} Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers; Implementation of the Local Competition Provisions of the Telecomms. Act of 1996; and Deployment of Wireline Servs. Offering Advanced Telecomm. Capability, *Report and Order and Order on Remand and Further Notice of Proposed Rulemaking*, 2003 FCC LEXIS 4697, (Aug. 21, 2003) [hereinafter *Triennial Review Order*].

^{4.} Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, *Declaratory Ruling and Notice of Proposed Rulemaking*, 17 F.C.C.R. 4798 (2002) [hereinafter *Cable Broadband Classification Proceeding*]; Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities, *Notice of Proposed Rulemaking*, 17 F.C.C.R. 3019 (2002) [hereinafter *Wireline Broadband Classification Proceeding*].

^{5.} Review of Regulatory Requirements for Incumbent LEC Broadband Telecomm. Servs., *Notice of Proposed Rulemaking*, 16 F.C.C.R. 22,745 (2001) [hereinafter *Nondominance Proceeding*].

If the Commission adopts at least some aspects of the approach it has proposed under these proceedings, it will have moved a long way toward replacing the traditional vertical regulatory regime that applied obligations and rights in large part depending upon the type of physical network that carried the service-phone networks, wireless, satellite, or cable—with a horizontal framework that should better equip the agency to regulate (and deregulate) in a world where broadband networks of all types carry the full set of electronic communications services—voice, video programming, and data. If the agency goes far enough, this could resemble the approach recently adopted by the European Union, and could help rationalize an increasingly fragmented and ultimately unsustainable system. To completely rationalize the regulatory regime in light of convergence and the digital migration might at the end of the day require rewriting the Communications Act. This is not on the horizon. But the Commission would be able to accomplish a great deal even operating under the current statute by reclassifying broadband services as Title I information services and regulating from the "bottom up" as discussed later in this article. However, as discussed later, this is a risky legal strategy because it is not clear that the courts will uphold the FCC's ancillary jurisdiction to impose regulations under Title I. Therefore, the more prudent course, and one that may also tie the agency closer to an analysis of the real competitive conditions, is for the agency to exercise its statutory forbearance authority under Title II and to deregulate from the "top down," eliminating unnecessary regulations and reducing the disparity in the regulatory treatment of different broadband service providers.

In Part II, I analyze four implications of this set of proceedings of particular concern for the states. This discussion is informed in part by conversations with state regulators. First, if broadband services are reclassified as Title I as the FCC has proposed, this will further reduce state jurisdiction over broadband services, particularly when combined with the deregulation and preemption of broadband wireline facilities.

Second, although the FCC's wireline broadband classification proceeding will have the most immediate and direct impact on independent Internet service providers, there are larger, longer term implications. FCC decisions in combination with industry deployment of new facilities and services could convert the nation's wired communication networks from a historically open, highly regulated system into a closed, private network largely outside the reach of state or federal regulators. If the Bells take advantage of the Triennial Review deregulation of new high speed networks, if the FCC classifies broadband transmission as a Title I service without invoking its ancillary jurisdiction in a way that eventually encompasses these new networks, if

VOIP takes off in a serious way as a voice service bundled with other broadband services, and if the FCC maintains its hands-off policy on VOIP, the combination of government and industry action could transform a highly regulated to essentially an unregulated industry. Granted, these are a lot of "ifs." And opposition from consumer groups, some scholars, state regulators, and the high tech industry, as well as the FCC's own sense of caution may keep the agency from going this far. But the agency may have to pull back from its earlier regulatory proposals to keep from stepping over the line, and if it does not, it could take Congress to put the genie back in the bottle. If there were full facilities competition, this would not raise concern. However, if the federal government gets it wrong, and full competition does not develop, then regulation over certain aspects of the information network and services may remain necessary.

Third, and of key concern to the states, this set of proceedings will affect the future of universal service in ways that are not yet fully understood. The universal service system funds telephone service for low-income persons, high cost (largely rural) areas, and Internet access for schools, libraries and hospitals. States are already concerned about the shrinking base for universal service contributions because of the declining revenue from long distance service, and are alarmed about the impact of further contracting the pool of contributing services that might come from reclassifying certain broadband services.

Finally, and of greatest interest, some states are concerned that the reclassification could stifle innovation and adversely affect free speech values. The ACLU and consumer groups have joined some members of the high tech community and content providers to warn against regulatory action (or inaction) that could lead to closing a network whose defining feature, and many would argue key to success, has been its openness. Some state regulators are more receptive to this argument than is the FCC, but one question will be what role states will be left or will seek if the FCC, as is likely, declines to adopt any safeguards in this area. State experimentation may be beneficial as a policy matter, primarily because at this stage it is impossible confidently to assess the risk to innovation of the government declining to impose safeguards. But as a legal matter, states will have a difficult time imposing their own safeguards if the FCC preempts state action. If the FCC declines to adopt even general safeguards, there should be further study of the potential gains and harms of allowing state regulation in this area.

I. THE BROADBAND PROCEEDINGS

A. Triennial Review: The Network and the Relationship Between Incumbents and Competitive Local Phone Companies

In the Triennial Review Order, the FCC dealt squarely and fairly radically with the Bells' obligations under section 251 of the 1996 Telecommunications Act to make their broadband facilities available at regulated rates to competing carriers. The agency very significantly deregulated broadband facilities. To understand this ruling requires a brief review of U.S. telecommunications regulation and wireline broadband technology.

1. The History

Until recently, the nation's telephone system was considered a natural monopoly, and regulated as a public utility, with the FCC overseeing interstate service and state agencies in charge of intrastate service.⁶ The Justice Department and the courts introduced competition into the interstate, long distance market through an antitrust action filed in 1974 against AT&T. In 1982, AT&T agreed to settle the case under a consent decree that, among other things, required it to divest the local Bell Operating Companies into seven companies providing local telephone service.⁷ The government's introduction of competition into the long distance market is given credit for establishing conditions that allowed for creation of the nation's Internet backbone systems. At the same time, however, local phone service was still viewed as a natural monopoly because the local network facilities, particularly the copper wires connecting homes and offices to the network—the "local loop" or "last mile"—were considered too expensive for competitors to replace.

A little over ten years later, Congress sought to introduce competition into the local market. It passed the Telecommunications Act of 1996,⁸ which overhauled the nation's telecommunications law and altered the relationship between state and federal regulators. In the name of deregulation, Congress created an elaborate system of regulation that provided three methods of opening the local markets: companies

^{6.} This, of course, oversimplifies. For a more complete picture of the complexity see PETER W. HUBER ET AL., FEDERAL TELECOMMUNICATIONS LAW 1-78 (2nd ed. 1999); AT&T Corp. v. Iowa Utils. Bd. 525 U.S. 366 (1999); LA Pub. Serv. Comm'n v. FCC, 476 U.S. 355 (1986).

^{7.} United States v. AT&T Co., 552 F. Supp. 131 (D.D.C. 1982), affd sub nom. Maryland v. United States, 460 U.S. 1001 (1983).

^{8.} Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified in scattered sections of 15, 18, and 47 U.S.C.).

building their own networks which would be interconnected to the incumbents' networks;9 companies using the "network elements" that would be "unbundled" from the incumbents' local networks;¹⁰ and companies reselling the services offered by the incumbent local providers.¹¹ In each case, the government was to establish a pricing regime for the incumbents' services and facilities that would be made available to competitors. Thus, under the Act, in return for allowing them to enter the long distance market, incumbents were required to allow their competitors to use the "last mile" of phone wire that runs to customers' houses, as well as certain other facilities. Not surprisingly, the Act spawned much litigation, including six trips to the Supreme Court, including over issues of state versus federal jurisdiction.¹² The Supreme Court first upheld the FCC's jurisdiction, as against state jurisdiction, both to define which network elements should be unbundled and to establish a pricing regime for their lease, but it determined that the FCC had improperly applied the statutory "necessary and impair" standard to identify the list of unbundled network elements.¹³

11. § 251(c)(4)(A) (duty to resell at wholesale rates any telecommunications service that carrier provides at retail to subscribers who are not telecommunications carriers).

12. AT&T Corp. v. Iowa Utils. Bd. 525 U.S. 366, 358, 388 (1999) (upholding FCC's jurisdiction to determine both network elements and pricing); Verizon Communications, Inc. v. FCC, 535 U.S. 467 (2002) (upholding FCC's rate setting principle "total element long-run incremental cost" or TELRIC); Nat. Cable & Telecomm. Ass'n v. Gulf Power Co., 534 U.S. 327 (2002) (upholding the FCC's determination that pole attachment provisions of the Telecommunications Act apply to attachments that provide high-speed Internet access combined with cable television); Verizon Md. Inc. v. Pub. Serv. Comm'n of Md., 535 U.S. 635, 648 (2002) (no 11th Amendment bar to suit by Verizon against state commissioners). The Supreme Court has agreed to hear two additional cases next term. Trinko v. Bell Atl. Corp., 305 F.3d 89 (2nd Cir. 2002), *cert. granted*, Verizon Communications Inc. v. Trinko, 123 S.Ct. 1480 (2003) (issue of whether certain actions, which violate the Telecommunications Act, constitute a claim under the Sherman Act); Mo. Mun. League v. FCC, 299 F.3d 949 (8th Cir. 2002), *cert granted*, Nixon v. Mo. Mun. League, 123 S.Ct. 2605 (2003) (whether states may prohibit cities from offering telecommunications service).

13. To guide the Commission in deciding which network elements are to be unbundled, the Telecommunications Act specifies:

^{9. 47} U.S.C. § 251(c)(2) (2000) (duty to interconnect).

^{10. §} 251(c)(3) (duty to sell individual elements unbundled from the incumbent's network). The Act defines a "network element" as

a facility or equipment used in the provision of a telecommunications service. Such term also includes features, functions, and capabilities that are provided by means of such facility or equipment, including subscriber numbers, databases, signaling systems, and information sufficient for billing and collection or used in the transmission, routing, or other provision of a telecommunications service.

^{§ 153(29).}

In determining what network elements should be made available for purposes of subsection (c)(3) of this section, the Commission shall consider, at a minimum, whether -

⁽A) access to such network elements as are proprietary in nature is necessary; and

Following the Supreme Court's remand on the "impairment" standard, the Commission once again faced the task of identifying which network elements the incumbents must unbundle, adding some new elements and eliminating a couple.¹⁴ In a separate order, the Commission further refined unbundling in a way to provide more competition in wireline broadband facilities. In the "Line Sharing Order," the FCC required incumbents to unbundle the high frequency portion of their copper local loop spectrum, making it available to competitive carriers that wanted to provide high speed Internet access through DSL (digital subscriber line) technology.¹⁵

In a strikingly undeferential opinion, *FCC v. USTA*, the D.C. Circuit harshly criticized and remanded both orders.¹⁶ It criticized the Commission's identification of unbundled network elements as insufficiently granular and the line sharing order as failing to take into account the relevance to competition in broadband services coming from cable and satellite.

2. The Triennial Review Order

The agency announced its decision in the wake of much intrigue, drama, money, and emotions. Much of the drama centered on the issue of the role of the states, particularly in determining the unbundled network elements for voice traffic that major competitors used. In what was characterized as a palace coup, one Republican commissioner sided with two Democratic colleagues to give the states a significant role in applying the statutory "impairment" test to determine what elements the incumbents must provide to competitors at the lower regulated rates. The irony of the Democrats providing a greater role to the states was not lost on the Republican Chairman Powell, who opposed giving the states

⁽B) the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer.

⁴⁷ U.S.C. §251(d)(2).

^{14.} Implementation of the Local Competition Provisions of the Telecomms. Act of 1996, *Third Report and Order and Fourth Further Notice of Proposed Rulemaking*, 15 F.C.C.R. 3696 (1999).

^{15.} Deployment of Wireline Services Offering Advanced Telecommunications Capability and Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, *Third Report and Order and Fourth Report and Order*, 14 F.C.C.R. 20912 (1999). Copper loops have a range of spectrum, and analog telephone service uses only the lower frequencies. DSL technology allows high-speed Internet access over the unused high-frequency portion of the spectrum. For an overview of DSL, cable, and other broadband technologies, *see* James B. Speta, *Handicapping the Race for the Last Mile?: A Critique of Open Access Rules for Broadband Platforms*, 17 YALE J. ON REG. 39 (2000).

^{16.} United States Telecom Ass'n. v. FCC, 290 F.3d 415 (D.C. Cir. 2002) (USTA).

such a role.¹⁷ This in effect retains, at least for some period, viable non-facilities based competition to the incumbents' residential voice service, which the incumbents claim is causing them serious financial harm.¹⁸ This portion of the Commission's decision was particularly controversial and will certainly be challenged on a number of grounds, including that it constituted impermissible delegation to state agencies.

The incumbents scored a very significant victory on broadband facilities. In the U.S., like Japan but unlike Europe, for example, the Commission had required the Bells to make the local loop available without regard to the technology of the loop. Phone companies will gradually replace at least portions of certain of their traditional copper lines with new fiber-optic networks, which have even greater speeds and capacity than current high speed networks serving corporations. In the Triennial Review, the FCC ruled that fiber (as opposed to the traditional copper) loops generally would be exempt from any type of unbundling.¹⁹ This conclusion is based on the premise that the original unbundling regime was meant to track the essential facilities doctrine in antitrust law and is also expressly designed to promote investment by incumbents in broadband networks. Second, the Commission eliminated the line sharing rule, which required incumbent carriers to make the high frequency portion of the copper loop available at lower regulated rates to competitive data network providers such as Covad, which in turn sold their DSL capacity to independent ISPs. All in all, this gives the incumbents even more than they had sought to accomplish in a massive

^{17.} See Triennial Review Order, supra note 3, Separate Statement of Chairman Michael K. Powell Dissenting in Part, at 5 ("To explain their decision, the majority has cloaked itself in the drape of 'State's Rights' (a classic conservative mantra not generally associated with a majority of democrats)").

^{18.} The FCC adopted a presumption that competitors were not impaired in their ability to provide service to business customers served by high-capacity loops, and therefore ruled that incumbents do not have to offer unbundled switching in those cases. State agencies were given 90 days to rebut the national finding. For small business and residential customers, the FCC adopted the presumption that competitors are impaired without access to unbundled switching. State agencies have nine months to determine whether competitors face economic and operations impairment in their jurisdictions.

^{19.} The only exception to this general rule is that in "overbuild" FTTH deployment situations (*i.e.*, where incumbents construct fiber facilities to replace their copper loops), ILECs will have to provide unbundled access either to an alternative copper loop facility or, if the copper loop has been retired, to a 64 kbps transmission path for carrying voice traffic over the fiber facility. "Hybrid" copper-fiber loops—which have fiber part way to the home, and then copper the rest of the way, and which are far more common than pure fiber—received mixed treatment. The FCC imposed no broadband unbundling for "packetized" systems, but required that competitors be given access to loops using TDM/circuit-switched systems.

lobbying campaign in Congress to pass the Tauzin-Dingell bill²⁰ and largely gives them the "new lines, new rules" regime they promoted.²¹

3. State Preemption and Delegation

The Order raises a number of state-federal issues regarding preemption and delegation. The incumbents will challenge the FCC's delegation of authority to the states in analyzing whether competitors are impaired without access to incumbents' switches for voice service. And states, consumer groups, or competitive carriers are likely to file appeals challenging the FCC's preemption of any state role in broadband facilities. A number of states have indicated that they would have preferred to maintain line sharing as well as unbundling obligations on some hybrid loops.²² But, so long as the courts uphold the underlying substantive FCC rules, the FCC likely will be successful in preempting state actions to reinstate broadband unbundling obligations.

The core preemption issue is whether, once the FCC removes the Bells' obligation to unbundle a particular network element, the states may retain or reimpose the obligation under state law. Some states and some competitive carriers argue that section 251(d)(3) of the 1996 Act provides them authority to establish additional unbundling obligations. Section 251(d)(3) provides:

Preservation of State Access Regulations. – In prescribing and enforcing regulations to implement the requirements of this section, the Commission shall not preclude the enforcement of any regulation, order, or policy of a State commission that –

- (1) establishes access and interconnection obligations of local exchange carriers;
- (2) is consistent with the requirements of this section; and
- (3) does not substantially prevent implementation of the requirements of this section and the purposes of this part.²³

^{20.} Internet Freedom and Broadband Deployment Act of 2001, H.R. 1542, 107th Cong. (2002).

^{21.} See Tom Tauke, A New Principle for a New Era: The Courage to Let Broadband Grow, Address at NARUC/NECA National Broadband Summit (Apr. 28, 2003) (referencing his 2001 "Old Wires, Old Rules/New Wires, New Rules" speech in Aspen, CO) (on file with author).

^{22.} In addition to competitive data companies, such as Covad, making use of low-cost line sharing, there are (admittedly isolated) examples of local cooperatives in rural areas not otherwise served by phone or cable broadband service which have launched their own high-speed internet service using line sharing. *See, e.g.*, Julia Angwin, *FCC's Ruling Could Deal Blow to Rural ISP's*, WALL ST. J., Feb. 25, 2003, at B1.

^{23.} Telecommunications Act of 1996, *supra* note 8, at § 251(d)(3)

Some competitive carriers argued that state unbundling requirements may not be preempted. As one put it, "The issue here is whether there can be *local* competition with the incumbents, and while there is a clear federal interest in this matter, State commissioners have jurisdiction over these issues as well."²⁴ They in effect interpret 251(d)(3) and 251(d)(2)as authorizing the FCC to establish a floor, but not a ceiling on the list of elements that must be made available to competitors. Equally predictably, the incumbents now argue that the FCC may not delegate to the states any latitude in adding elements to the federal list, and if the states attempt to do so, the courts should not permit it. Although the statute at one time, intervening case law has given the incumbents the better of the argument.

Initially, the FCC expressly left it to the state agencies to add, but not subtract network elements from the list established by the FCC.²⁵ But subsequent Supreme Court and the D.C. Circuit cases are best interpreted as establishing that section 251(d)(2) set limits on both the state and the federal regulators' ability to impose unbundling obligations on incumbents. In *Iowa Utilities Board*, the Supreme Court interpreted the 1996 Act to confer jurisdiction upon the FCC to enact rules to implement the unbundling provision of the Act. It further interpreted section 251 as imposing a limitation on the extent to which the FCC could impose unbundling obligations.

But we do agree with the incumbents that the Act requires the FCC to apply *some* limiting standard, rationally related to the goals of the Act, which it has simply failed to do....We cannot avoid the conclusion that, if Congress had wanted to give blanket access to the incumbents' networks on a basis as unrestricted as the scheme the Commission has come up with, it would not have included section 251(d)(2) in the statute at all. It simply would have said (as the Commission in effect has) that whatever requested element can be provided must be provided.²⁶

^{24.} Ex Parte filed by AT&T in CC Docket Nos. 01-338, 96-98, 98-147, *In re* Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, filed Nov. 14, 2002, at 5.

^{25.} FCC Interconnection Rule, Specific Unbundling Requirements, 47 C.F.R § 51.319 (1997); Implementation of the Local Competition Provisions in the Telecomms. Act of 1996, *First Report and Order*, 11 F.C.C.R. 15,499, 15,624, 15,683 (1996) (state agencies may identify elements that must be unbundled by local incumbents in addition to those identified by the FCC); Implementation of the Local Competition Provisions of the Telecomms. Act of 1996, *Third Report and Order and Fourth Further Notice of Proposed Rulemaking*, 15 F.C.C.R. 3696, 3768, ¶¶ 156, 157 (1999) (confirming that states may add but not subtract elements).

^{26.} AT&T Corp. v. Iowa Utils. Bd., 525 U.S. 366, 388-90 (1999).

In reviewing the FCC's revised unbundling analysis, the D.C. Circuit in USTA further elaborated on the nature and purpose of the limitation. According to the court's interpretation of section 251 and *Iowa Utilities Board*, "unbundling is not an unqualified good," because it "comes at a cost, including disincentives to research and development by both [incumbents] and [competitors] and the tangled management inherent in shared use of a common resource."²⁷ The court interpreted section 251 as a Congressionally imposed limit to reflect a balance of competing values at stake in implementation of the Act.

Taken together, these cases establish that in applying the "necessary and impair" standard of section 251, the FCC must determine whether the benefits of unbundling outweigh the costs. If the agency finds they do not, and if it thus keeps an element off the list, then it is not up to the states to overturn that assessment and add the element back on the list. In effect, the USTA court established that the FCC's UNE list constitutes both a floor and a ceiling. The FCC's earlier rule, 47 CFR section 51.317, which allowed states to add more elements to the incumbents' unbundling obligations cannot stand, because it fails to take into account the costs of unbundling that the D.C. Circuit ruled must be recognized in interpreting section 251. To be clear, the analysis applies only when the FCC has properly and completely conducted its "necessary and impair" analysis. If the Commission leaves the job incomplete and expressly carves out a role for the states, as it did with some aspects of the Triennial Review, the preemption analysis obviously does not apply. Or if a court later finds the Commission's application of the statutory standard was faulty, for example, because its analysis did not support a national finding of lack of impairment, then the preemption analysis does not save it. But the remedy would be for the agency to redo its analysis, not for the states to fill in the interstices.

The particular procedural vehicle the Commission established for challenging state actions combined with the peculiar vote on the issue of line sharing creates complexity for the ultimate outcome on at least this issue. The Commission ruled that parties could challenge a state decision to add additional elements. The Commission's standard of review would be whether a state action is inconsistent with federal policy. The fact that three of the five commissioners actually supported retaining line sharing could mean that the Commission's analysis could favor a finding that the state action is not inconsistent with federal policy. However, as a general matter, unless a reviewing court completely discredits the USTA court and the FCC's policy of promoting facilities based competition, the court should uphold an FCC determination that

^{27.} USTA, 290 F.3d 415, 429 (D.C. Cir. 2002) (citation omitted).

the states are preempted from adding broadband facilities to the list of unbundled network elements.

The core broadband policy question in the Triennial Review was whether the regulator should leave the incumbents unencumbered and trust that this will lead to broadband deployment and rely on inter-modal competition from cable and other platforms, such as satellite and wireline or power utilities, rather than continuing to try to force intra-modal wireline competition. The Commission opted for the former. Given the current state of the capital markets, and in light of the FCC's preemption of contrary state action, in effect all the country's eggs are in the basket of inter-modal competition for developing the next generation of broadband networks.

The FCC opted for not allowing state experimentation on the question of whether inter-modal or intra-modal competition would create more development of broadband networks. But there may nevertheless be some indirect effects of state agency decisions. At least one incumbent has strongly suggested that it will invest in advanced networks in those states where the regulators are not aggressive on the terms they require the incumbents to make the traditional networks available to competitors. I do not mean to suggest that the FCC deliberately opted for a policy of state-by-state experimentation on the issue of unbundling the traditional network. For all the factors that went into that outcome, that was not likely one of them.

B. Broadband Classification Proceedings: Can Network Owners Discriminate Against Network Use

For as long as many of us can remember, the federal government has required telephone companies to make their networks available on a nondiscriminatory basis to entities that use those networks to provide computer or data processing services of various sorts, including now the Internet. And the federal government, in furthering its industrial policy of supporting growth of computer technology and services, adopted a policy framework early on of fairly heavy regulation of the telephone network and no regulation of the computer services that ride over the phone network. This is the second government action that is given credit for setting the stage that allowed the Internet to develop. In marked contrast, though of much more recent vintage, the government has not imposed equivalent safeguards on the other main network that carries Internet traffic, the cable system.

The FCC opened a pair of rulemaking proceedings that reexamine its regulatory treatment of broadband transmission and Internet access offered over the cable and telephone networks. The agency rather

summarily invokes the policy goals of "encouraging the ubiquitous availability of broadband to all Americans," creating a "minimal regulatory environment that promotes investment and innovation in a competitive environment," and creating a "rational framework for the regulation of competing services that are provided via different technologies and network architectures."²⁸ The issues that are directly raised by the Commission and those that may be indirectly affected by its decisions could have profound consequences for the future development of communications services.

1. Common Policy Issues.

To better establish the policy framework before discussing the individual proceedings, I briefly identify three themes or issues that are common to each.

a. Statutory Classification of Broadband Services

The two broadband classification proceedings first pose the question of what statutory category applies to residential cable and wireline broadband Internet access services. And second, the agency asks what regulatory obligations should be imposed. The classification issues posed in both proceedings date back to concepts developed in a series of FCC decisions commenced in the 1960's that considered how to regulate computer services that are carried over the telephone network.²⁹ In the "Computer Inquiry" series, discussed in somewhat more detail below, the Commission distinguished common carrier transmission from computer ride over the common carrier network. services that The FCC continued to regulate heavily the "basic" telephone service as a common carrier under Title II of the Communications Act, but refrained from regulating the "enhanced" computer data services carried over the telephone facilities.³⁰

^{28.} Cable Broadband Classification Proceeding, supra note 4, at $\P\P$ 4-6. See also Wireline Broadband Classification Proceeding, supra note 4, at $\P\P$ 3-6.

^{29.} For a contextualized history of the development of the Computer Inquiry decisions, see Robert Cannon, *The Legacy of the Federal Communication Commission's Computer Inquiries*, 55 FED. COMM. LAW J. 167 (2003).

^{30.} The FCC defined "basic transmission service" as the offering of "a pure transmission capability over a communications path that is virtually transparent in terms of its interaction with customer supplied information." Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry), *Final Decision*, 77 F.C.C.2d 384, ¶ 96 (1980). "Enhanced services" are those "offered over common carrier transmission facilities used in interstate communications, which employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber's transmitted information; provide the subscriber additional, different, or restructured information; or

Congress endorsed this general approach in the Telecommunications Act of 1996 by distinguishing between Title II common carrier "telecommunications services," and Title I "information services." Congress defined "telecommunications service" as "the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used." ³¹

"Telecommunications" in turn is "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received."32 Congress defined "information service" as: "the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service."33 The Commission has concluded that the statutory terms "telecommunications service" and "information service" are essentially synonymous with the FCC's earlier terms "basic service" and "enhanced service."34

As a general matter, if Congress or the FCC categorizes a service as a Title II common carrier, it will be fairly heavily regulated, particularly if it is deemed to be dominant, unless the FCC exercises its statutory "forbearance" authority under Section 10 of the Act to deregulate.³⁵ In contrast, if Congress or the FCC classifies something as a Title 1 service, for example, by classifying it either as an "information service" or as "telecommunications," (as opposed to "telecommunication *service*") it will

33. Id. at § 153(20).

involve subscriber interaction with stored information." FCC Common Carriers Rules, Furnishing of Enhanced Services and Customer Premises Equipment, 47 C.F.R. § 64.702(a) (2003). Or as one commentator succinctly explains, "This generally means that what goes into the network is different than what comes out of the network." Cannon, *supra* note 29, at 186.

^{31. 47} U.S.C. § 153(46).

^{32.} Id. at § 153(43).

^{34.} Policy and Rules Concerning the Interstate, Interexchange Marketplace, *Report and Order*, 16 F.C.C.R. 7418, \P 2, n.6 (2001); Implementation of the Non-Accounting Safeguards of Sections 271 and 272 of the Communications Act of 1934, as Amended, *First Report and Order and Further Notice of Proposed Rulemaking*, 11 F.C.C.R. 21905, \P 102 (1996).

^{35.} Communications Act of 1934 § 10, 47 U.S.C. § 160 (2000). In the 1996 Act, Congress directed the FCC to "forbear from applying" any portion of the Act and its rules, so long as the application of the statute or rule was not necessary to ensure just and reasonable rates and practices, to protect against nondiscrimination, or to protect consumers, and forbearance was in the public interest. The Court of Appeals for the D.C. Circuit recently interpreted key terms of this statute in a way that does not require the agency to apply the stringent test urged by the industry in order to retain a rule. Cellular Telecomms. & Internet Ass'n v. FCC, 330 F.3d 502 (D.C. Circ. 2003).

not be regulated unless the FCC exercises its "ancillary jurisdiction" to impose regulations.

The Commission has ruled that broadband cable modem service is an "interstate information service," and it tentatively concluded that wireline broadband transmission is as well. The significance of the classification is that it removes broadband transmission and telecom and cable modem broadband internet access services, which make up 97% of the country's broadband services, from either common carrier or cable regulation, and places them within the largely unregulated statutory Title I category.

b. Competitor Access to the Networks

As discussed in more detail below, the major immediate and direct significance of the classification proceedings are the effect they will have on the long-standing policy and law governing whether competitive enhanced or information service providers ("ESP/ISP"), particularly independent Internet service providers ("ISP), will have regulated access to the underlying transmission they need to provide services to their customers. ISPs and other information service providers have a right of nondiscriminatory access to the telephone network. But as a general matter, ESP/ISPs currently have no legal right of access to the cable network, which, with two-thirds share of the residential market, is the leading broadband connection to most people's homes.³⁶ The FCC has asked for public comment on whether it should promote the policy goals of deregulation and regulatory "parity" by eliminating the ISP right to access to the telephone network.

c. Consumer Access to the Networks or "Network Neutrality"

Traditionally those seeking to offer a service over a communications network had to negotiate with the network owner to offer a service over the owner's network. But, increasingly, goods or services, such as those of Amazon.com, eBay and VOIP, can be offered from the "edge" of the network without negotiation or payments to the platform provider. Broadband transmission will make it increasingly viable in coming years to sell voice and video services such as VOIP, Wi-Fi, movies, and games,

^{36.} Wireline Broadband Classification Proceeding, supra note 4, n.91 (Verizon ex parte, in Wireline Classification Proceeding, citing UPS Warburg, Wireline Services: DSL Loses Share to Cable Again, Mar. 12, 2003). See also Federal Communications Commission Releases Data on High-Speed Services for Internet Access, FCC NEWS, June 10, 2003 (reporting that as of year end 2002, there were 6.5 million broadband wireline DSL lines, and 11.4 million cable modem lines), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-235274A1.docs.

from the edge of the network.³⁷ Thus, a major policy issue is whether Bell and cable companies can use their networks to limit or control competitive applications offerings.

Consumer groups, the ACLU, state regulators, some high tech and content companies, and at least one legal scholar, Lawrence Lessig, have warned of the need to protect the principles of network openness that allowed for the development of the Internet and that will permit continued innovation in applications. ³⁸ In effect, these advocates have shifted the policy debate from the rhetoric of competitor access to the network to consumer access. ³⁹

Apart from limited access requirements imposed as merger conditions, cable companies have complete control over the use of their systems and both the technical and legal ability to restrict use. Some warn that deregulation of broadband wireline transmission, if combined with a significant rise in unregulated VOIP, could convert the country's telecom network into a private, closed system outside the reach of federal or state regulation. The National Association of Regulatory Utility Commissioners last November passed a resolution opposing "unreasonable discrimination" by broadband network providers on users' access to lawful content, including applications.⁴⁰ Supporters of these "consumer connectivity" or "network neutrality" principles invoke the tradition of "Carterphone," in which the FCC required AT&T to allow

^{37.} See Blair Levin, Beyond UNE-P: The Edge vs. the Network – a/k/a "Open Access II," Legg Mason Research Report, Dec. 5, 2002, filed as attachment to ex parte by Coalition of Broadband Users and Innovators, in Cable Modern Classification and Wireline Broadband Classification Proceedings, Dec. 13, 2002.

^{38.} See, e.g., LAWRENCE LESSIG, THE FUTURE OF IDEAS (2001); Presentation at Silicon Flatirons Telecommunications Program Conference, The Regulation of Information Platforms, (Jan. 27, 2002); ACLU White Paper, No Competition: How Monopoly Control of the Broadband Internet Threatens Free Speech, available at, http://archive.aclu.org/issues/ cyber/NoCompetition.pdf (Summer 2002) [hereinafter ACLU White Paper]; NARUC Resolution Regarding Citizen Access to Internet Content, Adopted NARUC Convention, (Nov. 12, 2002), available at http://www.naruc.org/Resolutions/2002/annual/telecom/ citizen_access.shtml [hereinafter NARUC Resolution].

^{39.} Admittedly, the distinction between competitor and consumer access can blur, as both can involve products or services sold directly to consumers that utilize the broadband platform. And indeed, it is by controlling consumers' access to certain content, products or services that the platform owners could affect the ability of those providers to compete with the platform owners' own voice or content services. The key difference (and perhaps only useful distinction) is that competitor access, which really encompasses only competition in complementary applications such as Internet access or programming and is not meant to include competition in the physical platform, requires the competitor to be able to negotiate with the platform provider to supply transmission that is bundled with the complementary application. For products or services associated with "consumer access," there may still be a direct relationship between the customer and the good or service, and the service utilizes the broadband platform, but the company providing the service generally need not negotiate directly with the platform operator to resell the transmission or pay the platform provider.

^{40.} NARUC Resolution, supra note 38.

[Vol. 2

consumers to connect devices to the network,⁴¹ rather than AOL's efforts, prior to its merger with Time Warner, to convince the government to require cable operators to offer "open access" to *competitor* ISPs.⁴²

There is some debate, even sometimes among those advocating the network neutrality position, regarding the precise nature of the harm as well as the best remedy. The ability of network owners to discriminate according to amount of capacity used or service quality is not really at issue. There is general agreement that network owners should be able to charge customers more who use the network more or who demand a higher guaranteed level of service quality. Nor is there any quarrel with the general principle that network owners should be able to restrain use that could harm the network. Advocates generally criticize cable service contracts that prohibit virtual private networks because they discriminate against *types* of service. The same would be true for restrictions on connecting Wi-Fi equipment or using VOIP over the network, assuming no case could be made that there was network harm.

The debate gets more complex regarding the ability and incentive of network owners to take actions that affect users' access to certain content. Advocates of network neutrality principles did not agree among themselves on the recent agreement between SBC and Yahoo, which granted preferential front page placement to Yahoo. Amazon.com and Yahoo found this a perfectly reasonable business practice. The Consumer's Union found this just another example of discriminatory action by the network owner.43 Other examples could include a network owner that makes it quicker or easier for an Internet user to find a web site of a particular hotel in return for a fee paid by the hotel to the network owner. Or in a more extreme case, the network owner might block or discourage streaming video in order to protect its competing content business. Or in the most extreme case, the network owner might have an exclusive deal with one content provider that keeps users from being able to access competitors' content. Opponents of increased

^{41.} Use of the Carterfone Device in Message Toll Telephone Service, 13 F.C.C.2d 420 (1968) (holding that AT&T could not prevent the use of a device that facilitated connections between different networks, and announcing a broad protection for users to connect foreign devices to the telephone network).

^{42.} See Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations by Time Warner Inc. and American Online, Inc., Transferors, to AOL Time Warner, Inc., Transferee, *Memorandum Opinion and Order*, 16 F.C.C.R. 6547 (2001); American Online, Inc., and Time Warner, Inc., 2000 WL 1843019 (FTC), Docket No. C-3989, *Decision and Order* (Dec. 14, 2000) [hereinafter *FTC AOL Time Warner Merger Order*] (requiring access for small number of unaffiliated ISPs and prohibiting interference with the content of unaffiliated ISPs).

^{43. &}quot;Net Neutrality or Net Neutering: Should Broadband Internet Service be Regulated," Progress and Freedom Foundation Conference (June 27, 2003).

regulation argue that first, there is no evidence that any sort of content related discrimination has occurred, and second, that granting network owners complete control over their systems can lead to better products and services.

Thus, this is about the ability and incentive of monopoly (or duopoly) broadband providers to leverage market power in the provision of broadband services into a closely complementary activity. Current mainstream antitrust doctrine generally presumes that such vertical agreements are unobjectionable. Telecommunications policy, in contrast, has preferred an open architecture based on modularity as opposed to an integrated proprietary system, which, as Farrell and Weiser note, has in certain situations, including the development of the Internet, the development of the computer industry, and the development of competition in telecommunications, seemed to facilitate innovation.⁴⁴

The question for regulators is how to determine when platform monopolists (or duopolists) will efficiently conclude whether to allow applications competitors to access their platforms to provide competing complementary services and when they will instead fully integrate and keep others off. Farrell and Weiser provide a subtle analysis of the various exceptions to the general rule of "internalizing complementary efficiencies" or "ICE" and its implications for the open access debate. According to the ICE principle, a monopoly platform provider that sticks with its core platform business will prefer that applications be cheaply and abundantly supplied because this increases demand for platform transmission. And, under some circumstances, even where the monopoly platform provider gets into the business of supplying applications for its platform, and where it has the ability to hinder applications rivals, it may still act efficiently in deciding how to treat applications competitors, and where competition in the applications market is efficient, the platform monopolist will protect competition. However, Farrell and Weiser go on to identify situations where this general principle may not apply, including where the platform provider is subject to regulation but the applications market is not, and in certain contexts of price discrimination. One example is particularly relevant to the network neutrality discussion:

Because modern economic thought is not hostile to price discrimination, some commentators categorically discount price

^{44.} Joseph Farrell & Philip J. Weiser, *Modularity, Vertical Integration, and Open Access Policies: Towards Convergence of Antitrust and Regulation in the Internet Age*, 17 HARV. J.L. & TECH. (forthcoming 2003), *available at* http://repositories.cdlib.org/iber/cpc/CPC02-035/.

discrimination as an exception to the logic of ICE. But this is a mistake. Even where the price discrimination itself enhances efficiency, the platform monopolist may impose highly inefficient restrictions on applications competition in order to engage in price discrimination, particularly where there is a history of consumer willingness to pay for products in a certain manner. A possible example is the unwillingness of cable providers to allow streaming video applications to use their cable modems. ICE would suggest that cable providers should happily endorse this usage of their platform, as it would raise the potential profits available from this platform. The hole in the argument is that a cable provider who allows video streaming will find it harder to engage in the profitable and customary price discrimination that sets high markups for premium cable programming, leading them to consider banning (or disadvantaging) this method of distribution altogether.⁴⁵

Another possible exception is what Farrell and Weiser call "incompetent incumbents." "As a prediction of business strategies, ICE can and will fail if the platform monopolist fails to understand ICE itself.... In our experience, businesspersons often find it counterintuitive to help outside firms compete against internal supply in applications."⁴⁶ The platform provider with monopoly power may keep new applications off its network to deter future innovation that may compete either with its platform or with complementary products.

2. Cable Broadband Classification Proceeding: The Relationship Between Cable Companies and Information Service Providers

When AT&T began to pursue its strategy to enter the residential broadband services market by buying cable companies, some ISPs argued that the FCC should require cable companies to allow competing ISPs onto their network. The FCC declined to do so and also declined to classify the cable broadband service as a Title VI cable service, a Title II telecommunications service, a Title I information service, or something else altogether.⁴⁷ But some local governments, stepping in to fill a

^{45.} Id. at 27.

^{46.} Id. at 33.

^{47.} Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from MediaOne Group, Inc., Transferor to AT&T Corp., Transferee, *Memorandum Opinion and Order*, 15 F.C.C.R. 9816, 9866-73, ¶¶ 116-28 (2000) (noting AT&T commitment to provide unaffiliated ISPs with access to cable systems, and the Department of Justice consent decree requiring AT&T to divest MediaOne's ownership of RoadRunner and to seek DOJ approval before entering into certain types of agreements with Time Warner or AOL relating to the provision of high-speed Internet access services); Applications for Consent to the Transfer of Control of Licenses and Section 214 Authorizations from Tele-Communications, Inc., Transferor to AT&T Corp., Transferee,

perceived vacuum created by the federal government, conditioned their cable franchise transfer approvals on the cable operators making their networks available to competing ISPs. The courts, however, had the next say.

The Ninth Circuit in *AT&T Corp v. City of Portland*⁴⁸ ruled that federal law barred Portland from imposing open access conditions on a cable franchise transfer. The court ruled that cable modem service was not a cable service, and therefore was outside the jurisdiction of the local franchise authority. Along the way, the court stated that cable modem service is a combination of the Internet access service, which is an "information service," transported over the cable broadband facility, which the court found to be a "telecommunications service."⁴⁹ This latter classification rattled the cable industry, which had no appetite for having its broadband facilities swept within the highly regulated ambit of common carrier telecommunications services. They had otherwise avoided industry-wide regulation, with the only open access obligations imposed by the Federal Trade Commission as conditions of the specific merger between AOL and Time Warner.⁵⁰

The FCC subsequently departed from the court's conclusion and in the Cable Broadband Classification Proceeding ruled instead that cable modem service is an "interstate information service."⁵¹ In this Proceeding, the FCC also ruled that although the cable modem service includes a "telecommunications component," there is no separate offering of a common carrier "telecommunications service" to either ISPs or to end user customers, thus effectively both removing cable broadband from local jurisdiction and, at the federal level, placing it outside the more highly regulated classifications of cable or telecom service. The FCC further waived any Computer Inquiry requirements that might be applied to cable operators providing local phone service over the cable plant.⁵²

Memorandum Opinion and Order, 14 F.C.C.R. 3160, 3205-07, ¶¶ 93-96 (1999) (no requirement imposed).

^{48. 216} F.3d 871 (9th Cir. 2000).

^{49.} *Id.* at 878. The Fourth Circuit struck down a Virginia county open access requirement in *MediaOne Group v. County of Henrico*, 257 F.3d 356 (4th Cir. 2001). In contrast to the Ninth Circuit, the Fourth Circuit declined to reach the question of how to classify cable broadband services, deferring instead for the time being to the FCC's administrative process. The court held that, regardless of how cable modem service is classified, Henrico County had violated 47 U.S.C. 541(b)(3)(D) by forcing MediaOne to provide its telecommunications facilities to any ISP as a condition for the county's approval of a cable franchise transfer. *Id.* at 362-64.

^{50.} *FTC AOL Time Warner Merger Order, supra* note 42 (requiring access for small number of unaffiliated ISPs and prohibiting interference with the content of unaffiliated ISPs).

^{51.} Cable Broadband Classification Proceeding, supra note 4, at 22-27, ¶¶ 33-41.

^{52.} *Id.* at 28-29, ¶ 45.

Brand X (an unaffiliated ISP), EarthLink, the State of California, and Consumer Federation of America appealed the classification ruling in various jurisdictions. The case is back before the Ninth Circuit on the basis of a multidistrict litigation lottery.⁵³ If the court adheres to its original view that the underlying transmission is a "telecommunications service," the FCC has signaled it would use its forbearance authority to avoid imposing common carrier obligations on broadband transmission, but an adverse court ruling would open a long period of uncertainty and unravel the larger package of proceedings.⁵⁴ It would be exceedingly difficult for the agency to find that broadband services provided by telecommunications carriers are not a "telecommunications service" in the face of a court holding that broadband services provided by cable companies are a "telecommunications service." And it may not be possible for the FCC to satisfy the statutory criteria to forbear from each and every Title II obligation.

The FCC Order included a Notice of Proposed Rulemaking inviting public comment on whether it should require multiple ISP

^{53.} The appeal raises the relationship between stare decisis and Chevron deference to an administrative agency's statutory interpretation, and the judges dwelled on this issue at oral argument. See Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837 (1984). The FCC relied on Mesa Verde Constr. v. Northern. California Dist. Council of Laborers, 861 F.2d 1124 (9th Cir. 1988) (en banc), to support its claim that the Ninth Circuit should defer to the agency's subsequent classification of cable broadband services. In Mesa Verde, the Ninth Circuit held that if prior panel decisions "constitute only [a] deferential review of NLRB interpretations of labor law, and do not decide that a particular interpretation of [a] statute is the only reasonable interpretation, subsequent panels of this court are free to adopt new and reasonable NLRB decisions without the requirement of en banc review." Id. at 1134-35 (citation omitted). That case is distinguishable, however, because unlike in Mesa Verde, the Portland court's decision did not constitute a deferential review of an agency interpretation. Rather, the Portland court noted expressly that the FCC declined to give any interpretation. "We note at the outset that the FCC has declined, both in its regulatory capacity and as amicus curiae, to address the issue before us. Thus, we are not presented with a case involving potential deference to an administrative agency's statutory construction pursuant to the Chevron doctrine." Portland, 216 F.3d at 876. It makes more sense for a court not to be bound by stare decisis when its decisions involve deference under the Chevron doctrine to an agency's statutory interpretation. In both cases, it is not the court's decision that controls, but rather the agency's. In contrast, when, as here, the initial court decision is its own independent statutory interpretation, the claim to stare decisis is stronger.

^{54.} As a Title II carrier, the cable companies could be required to comply not only with Computer Inquiry access, but general interconnection obligations, the duty to carry traffic without unreasonable discrimination, the duty to furnish service upon reasonable request, the duty to offer service on terms and conditions that are just and reasonable, to install network equipment that meets the requirements of the Communications Assistance to Law Enforcement (CALEA), to contribute to federal universal service fund, and to obtain FCC approval prior to exiting a market, unless the FCC exercised its statutory forbearance authority under section of the 1996 Act to remove certain Title II obligations. The Ninth Circuit noted the FCC's authority to forbear from regulation, *Portland*, 216 F.3d at 879, and the FCC tentatively concluded that Title II regulation would not be appropriate and that it should forbear from it. *See Cable Modem Classification Proceeding, supra* note 4, at 35, ¶ 58 n. 219.

access under its Title I ancillary jurisdiction. The ACLU and other network neutrality advocates subsequently have argued that important First Amendment principles are compromised if the Internet network owners can discriminate against or in favor of certain speech. But unless cable operators are found to have acted egregiously and denied access, the FCC likely will find the threats too hypothetical and not sufficiently proximate and will instead warn that they will keep an eye on everyone. The fear of explicit regulation could lead cable to operate under an implicit rule similar to what the high tech community and the states have proposed. By raising the issue, these advocates led the cable companies to state publicly that they do not discriminate, which makes it more difficult for them to do so in the future and makes it easier for government to impose nondiscrimination requirements on them if they do. Weiser's proposal-that the FCC should mandate a general requirement of nondiscriminatory access but provide network providers the opportunity to justify discrimination on a case-by-case basisdeserves serious consideration.55

The Commission also raised questions regarding which government agencies, if any, have jurisdiction to regulate cable modem service including questions of consumer protection, privacy, and rights-of-way. The FCC is likely to be reluctant to preempt the states or local governments in regulating in these areas because the government in general cannot ignore these issues, but the FCC has little appetite for taking them over. If the states or localities retain jurisdiction over these issues, it could provide some fodder for their seeking to impose consumer connectivity principles. The Commission could, however, as it did in the Triennial Review impose some general guidelines and delegate implementation to the local governments. But without the dual jurisdiction established by statute as with the case of local loop unbundling, such delegation might be vulnerable to challenge, unless they allow the local authorities to opt out.⁵⁶

3. Wireline Broadband Classification: The Relationship Between Incumbents and Information Service Providers

The FCC also initiated a proceeding to examine whether and how to regulate broadband access to the Internet provided over wireline

^{55.} See Philip J. Weiser, Toward A Next Generation Regulatory Regime, 49 LOY. L. REV. (forthcoming 2003).

^{56.} *Cf.* New York v. United States, 505 U.S. 144 (1992); Printz v. United States, 521 U.S. 898 (1997) (federal government may not "commandeer" the states); Unfunded Mandates Reform Act of 1995, 2 U.S.C. §§ 1571, 1501ff (2000) (establishing a procedure for consideration of bills that would impose unfunded mandates on state and local governments).

facilities.⁵⁷ The FCC tentatively concluded that when a company provides wireline broadband Internet access service over its own lines, the bundled Internet access-broadband transmission service is an "information service," and the underlying transmission is not a common carrier "telecommunications service" but rather "telecommunications." The FCC went on to ask for comment on a prior agency ruling that if a company provides wholesale or retail broadband transmission, uncoupled with Internet access, that service carrier is a common "telecommunications service."58

The precise scope of the Wireline Broadband Classification proceeding is unclear. It appears that the Commission intends its decision to apply only to Internet access, but it may be difficult and I believe it is undesirable for the Commission to confine its analysis in a way that does apply to other information service providers. The proceedings may also not apply to new fiber networks. If this holds, then the FCC is dealing with the world of today, but not tomorrow. The express (though buried in a footnote) exclusion of "all-fiber networks" may represent an effort by the FCC to limit to the copper plant any decision to classify broadband transmission as Title I so that it will be free to reconsider the regulatory framework as the networks migrate to fiber.⁵⁹ Again, however, it may be difficult for the FCC to confine the reach of its analysis to DSL. It is difficult to imagine what analysis would apply to lead to the conclusion that DSL broadband is an information service that would not also apply to conclude the same for fiber.

What is most directly at stake in the classification is the continuation of the Computer Inquiry safeguards. As discussed above, in a series of decisions initiated in the 1960's, the FCC declined to regulate the data processing services carried over the monopoly telephone network. But out of concern that the telephone industry could exploit its monopoly over the phone lines to prevent competition from developing in the enhanced services industry, by discriminating in favor of its own enhanced services in providing access to the telephone transmission facilities, the FCC developed a system of safeguards ensuring access to the "basic" network services. If the FCC reclassifies the underlying network as an information service, the legal predicate for granting enhanced service providers nondiscriminatory access to the network will be gone.

^{57.} Wireline Broadband Classification Proceeding, supra note 4.

^{58.} Id. at 11, ¶ 17, 15-16, ¶ 26.

^{59.} Id. at 2, n.1.

a. Computer Inquiry Safeguards of Enhanced Service Providers' Access to the Network

The core Computer Inquiry requirement is that if a facilities based common carrier provides Internet access service (or any enhanced or information service) it must give unaffiliated ISPs (or any other enhanced or information service providers) nondiscriminatory access, both in terms of price and provisioning, to the basic underlying telecom transmission used in the provision of information services. This applies to both dial-up and broadband transmission.

The nature of the safeguards changed over time. In the beginning, the FCC adopted a severe structural approach, forbidding the platform monopolist from participating in the applications sector. In *Computer I*, the FCC decided not to regulate data processing, and relied on an earlier consent decree that limited AT&T to providing regulated common carrier services.⁶⁰ This turned out to be difficult to implement because it required the FCC to classify all services as either "telecommunications" or "data processing," which proved increasingly difficult as computer and communications technology continued to merge and called into question some of the basic underpinnings of the regulatory approach.

In *Computer II*, the Commission developed a new set of categories, distinguishing between "basic" telecommunications services and "enhanced" services and ordered the incumbents to provide the basic transmission services under tariff on an equal basis to all customers and required Bell companies to form separate companies to provide their own enhanced services.⁶¹

In *Computer III*, the FCC revisited this system of structural separation safeguards after AT&T divested its local Bell Operating Companies pursuant to the antitrust consent decree.⁶² The agency

^{60.} See generally Regulatory and Policy Problems Presented by the Interdependence of Computer and Communications Servs. & Facilities, *Final Decision and Order*, 28 F.C.C.2d 267 (1971), *affd in part, modified sub nom.* GTE Serv. Corp. v. FCC, 474 F.2d 724 (2d Cir. 1973), decision on remand, *Order*, 40 F.C.C. 2d 293 (1973) [hereinafter *Computer I*].

^{61.} Amendment of Section 64.702 of the Commission's Rules and Regs. (Second Computer Inquiry), *Final Decision*, 77 F.C.C.2d 384 (1980) [hereinafter Computer II], on reconsideration, *Memorandum Opinion and Order*, 84 F.C.C. 2d 50 (1980) and *Memorandum Opinion and Order on Further Reconsideration*, 88 F.C.C. 2d 512 (1981), *aff'd sub nom.* Computer and Communications Indus. Ass'n v. FCC, 693 F.2d 198 (D.C.Cir. 1982) (*CCIA*) (the incumbents' enhanced service subsidiaries were required to maintain separate physical facilities, personnel, and accounting records).

^{62.} Amendment of Section 64.702 of the Comm'n's Rules and Regs. (Third Computer Inquiry), *Report and Order*, 104 F.C.C.2d 958 (1986) [hereinafter *Computer III*]; on reconsideration, *Memorandum Opinion and Order on Reconsideration*, 2 F.C.C.R. 3035 (1987); *Memorandum Opinion and Order on Reconsideration*, 3 F.C.C.R. 1135 (1988) and *Memorandum Opinion and Order on Further Reconsideration and Second Further Reconsideration*, 4 F.C.C.R. 5927 (1989), vacated in part, California v. FCC, 905 F.2d 1217

recognized the cost of structural separation and reasoned that it was less necessary in light of the divestiture and increased competition. However, because the Bells continued to have monopoly power over the local phone lines, the FCC determined that nondiscrimination safeguards were still necessary. It replaced the structural separation requirement with nonstructural or conduct safeguards to prevent anticompetitive activity by the monopoly platform provider against competing applications provider. Thus, the monopoly providers were free to provide enhanced services without using separate affiliates so long as they satisfied the nonstructural or conduct safeguards.⁶³

b. Possible FCC Classification Rulings and Analysis of Common Carrier Status

The FCC will likely at a minimum conclude that an integrated or bundled Internet access service provided over a third party's broadband facilities or over the carrier's own broadband transmission facilities on a retail basis should be classified as Title I information services.

The more challenging question is whether and how the FCC will tackle the issue of classification of broadband transmission itself. The agency has raised the issue in two ways, which together seem to encompass both methods by which the telephone companies provide broadband service. First, the FCC has proposed that the self-provisioned broadband transmission that underlies an integrated ISP service should be classified not as a separate common carrier telecommunications service, but rather as "telecommunications." This decision standing alone would remove a number of discrete regulatory

⁽⁹th Cir. 1990) (*California I*); Computer III Remand Proceedings, *Report and Order*, 5 F.C.C.R. 7719 (1990); on reconsideration, *Memorandum Opinion and Order on Reconsideration*, 7 F.C.C.R. 909 (1992); Bell Operating Company Safeguards and Tier I Local Exchange Company Safeguards, *Report and Order*, 6 F.C.C.R. 7571 (1991), *vacated in part and remanded*, California v. FCC, 39 F.3d 919 (9th Cir. 1994) (*California III*); Computer III Further Remand Proceedings: Bell Operating Co. Provision of Enhanced Servs., *Report and Order*, 14 F.C.C.R. 4289 (1999); on reconsideration *Order*, 14 F.C.C.R. 21,628 (1999).

^{63.} In *Computer III*, the FCC adopted two regimes. Under "open network architecture" (ONA) the FCC required the Bells to unbundle the service components into "building blocks" or elements that would be made available to enhanced services providers to permit them to construct their own innovative services as easily as the Bells. As an interim measure, while the Bells were developing ONA plans, the FCC required them to file "comparably efficient interconnection" (CEI) plans for each enhanced service the Bells offered. The CEI plans were meant to ensure that competitors could connect to the Bell networks on equivalent terms that the Bells used for their own enhanced services. The ONA rules are still on review at the FCC after the Ninth Circuit remanded the order. California v. FCC, 39 F.3d 919 (9th Cir. 1994). The CEI requirements are still in effect, but have been pared back by the FCC in an effort to make them less burdensome.

obligations.⁶⁴ One less proximate, but more significant consequence could follow, as discussed below, if the FCC classifies the standalone broadband service as a common carrier, and a Bell does not offer broadband on a standalone basis, but offers it only when bundled with an information service.⁶⁵ If the FCC classifies the underlying transmission of the integrated service as Title I, then the Bells would have achieved regulatory parity with cable and would have moved broadband (or at a minimum, DSL) service outside regulation.

The FCC also raised the issue of how to classify and regulate the standalone broadband transmission that is sold both to end user customers and to independent ISPs and other information service providers. Although the FCC had previously ruled that this is properly classified as a common carrier service, it expressly opened for reconsideration its earlier decision.⁶⁶

Formally, the Commission's classification decision should be guided by application of the standard set out in *NARUC v. FCC*.⁶⁷ Under the FCC's interpretation of the court's two-part test for common carriage, the Commission considers whether (1) the "carrier makes capacity

^{64.} It would provide clarity to the industry that it need not file tariffs on the integrated ISP/DSL service. It should also establish that incumbents need not make DSL service available on a discounted, resale basis pursuant to 47 U.S.C. § 251(c)(4), if they do not otherwise make DSL services available on a retail basis, thereby resolving an issue the Commission left outstanding in its order granting SBC's application pursuant to section 271 to provide long distance services in Missouri and Arkansas. See Joint Application by SBC Communications Inc., Southwestern Bell Telephone Company, and Southwestern Bell Communications Services, Inc. d/b/a Southwestern Bell Long Distance Pursuant to Section 271 of the Telecommunications Act of 1996 to Provide In-Region, InterLATA Services in Arkansas and Missouri, Memorandum Opinion and Order, 16 F.C.C.R. 20,719, 20,759-60 (2001). The FCC can still consider separately whether to impose universal service fund obligations. Carriers currently make universal service contributions on the revenue from this integrated service provided on self-provisioned transmission, and reclassifying the service as Title I would call this obligation into question. The FCC stated that these contributions will remain in effect during the pendency of its overall universal service proceeding even if it reclassifies the underlying transmission as a Title I service.

^{65.} Though the incumbents would need to file with the Commission under section 214 to discontinue the service, and this would give the Commission a jurisdictional predicate to assess the consequences, it is unlikely the agency would require the carriers to continue to provide standalone DSL. Not every Bell offers standalone retail DSL service to residential customers today. Some offer residential customers only a bundled information service and offer ISPs a wholesale DSL standalone transmission service, and business customers a retail standalone broadband service.

^{66.} See Wireline Broadband Classification Proceeding, supra note 4, at 15, ¶ 26, (citing Classification Pro Deployment of Wireline Services Offering Advanced Telecommunications Capability, *Memorandum Opinion and Order and Notice of Proposed Rulemaking*, 13 F.C.C.R. 24,012, 24,029, ¶ 35 (1998) (finding that advanced services such as DSL constitute telecommunications services when offered to the public directly on a stand-alone basis).

^{67.} Nat'l Ass'n of Regulatory Util. Comm'rs v. FCC, 525 F.2d 630 (D.C.Cir. 1976) (*NARUC J*). See Virgin Is. Tel. Corp. v. FCC, 198 F.3d 921 (D.C. Cir. 1999) (affirming the applicability of the NARUC standard after the 1996 Telecommunications Act).

available to the public indifferently" or (2) whether the "public interest requires common carrier operation of the proposed facility."68 But as a practical matter, the FCC will be guided in its deliberations by the ultimate policy objectives it seeks to accomplish and will shape its legal analysis accordingly, where, as here, the legal standard is sufficiently malleable. Indeed, the Commission has concluded that a number of services that are either pure transmission or that have a transmission component need not be classified as a common carrier, including satellite,⁶⁹ submarine cables,⁷⁰ and a number of mobile services.⁷¹ The first prong of the NARUC test, whether the carrier has served the public indifferently, should not be considered in light of the fact that the law required incumbents to do so (although this history of common carriage service might justify imposing a transition period to accommodate the fact that ISPs have relied on the availability of telephone transmission). The analysis should focus instead on the second prong, whether the public interest requires common carriage.

There are four major sets of regulatory obligations that attach to common carrier broadband transmission that are at stake and that should guide the FCC's analysis. In undertaking the *NARUC* analysis, the Commission should focus on both end user or consumer access to broadband services and access by companies, such as ISPs and other enhanced service providers such as Wi-Fi, VOIP, and content providers such as Amazon, which may compete with the network owners' complementary advanced services and which depend on access to the networks in order to provide their services. The collateral set of obligations that apply equally to telephone service providers, such as wire-tapping capability, consumer protection rules affecting privacy, access by persons with disabilities, and the issue of contributions to the universal service fund, raise separate issues and may be more easily

^{68.} Cable & Wireless, PLC, 12 F.C.C.R. 8516, ¶¶ 14-15 (1997). The judicial standard is "first, whether there will be any legal compulsion . . . to serve [the public] indifferently, and if not, second, whether there are reasons implicit in the nature of [the] operations to expect an indifferent holding out to the eligible user public." *NARUC I*, 525 F.2d at 642.

^{69.} Licensing Under Title III of the Communications Act of 1934 as Amended, of Non-Common Carrier Transmit/Receive Earth Stations Operation with the Intelsat Global Communications Satellite System, *Declaratory Ruling*, 8 F.C.C.R. 1387 (1993) (allowing most satellite services on a private carriage basis).

^{70.} AT&T Submarine Systems, Inc., *Memorandum Opinion and Order*, 13 F.C.C.R. 21,585 (1998), *aff'd*, *Virgin Is. Tel.*, 198 F.3d 921; *In re* FLAG Pac. Ltd., 15 F.C.C.R. 22,064 (2000) (allowing submarine cable to be offered as private carriage).

^{71.} Amendment of the Commission's Rules to Establish New Personal Communications Services, *Policy Statement and Order*, 6 F.C.C.R. 6601 (1991); Petition for Reconsideration of Amendments of Parts 2 and 73 of the Commission's Rules Concerning Use of Subsidiary Communications Authorization, *Memorandum Opinion and Order*, 98 F.C.C.2d 792 (1984) (private carrier paging system may be offered either on a common or non-common carrier basis).

reinstated under the FCC's ancillary jurisdiction or jurisdiction over universal service.⁷²

ISP and other enhanced service access is most directly raised in this proceeding. The Bells argue that they should be relieved of the Computer Inquiry obligations to provide nondiscriminatory access to independent ISPs and other enhanced or information service providers because the world has changed since the Computer Inquiry proceedings. The Bells argue that ISPs now have ample alternative platforms, and point in particular to the fact that cable has about two-thirds of the residential and small business broadband market and complain of the FCC regulating more heavily the second place contender. They argue that regulatory parity is now necessary to give them the same flexibility to control their network as their major competitor, the cable industry, has. (The need to act in certain ways in order to become a more effective competitor to cable is the same argument the satellite companies, EchoStar and DirectTV, made in their unsuccessful attempt to merge. There, although admittedly in a very different context—a merger rather than industrywide competitive safeguards-the FCC found a duopoly was insufficient to relax governmental controls.) The Bells further argue that asymmetric regulation distorts the market and creates disincentives to investment. Bells argue generally for "regulatory parity," with their first choice being deregulation, but the second choice of some is increased regulation of cable.

The problem with the Bells' argument regarding information and enhanced service providers' access is that it exaggerates their options. If the relevant market is not the end user market for bundled Internet access/broadband service, but instead is the wholesale ESP/ISP market for unbundled broadband transmission, then incumbent telephone companies currently have the largest market share. Although the Bells and the FCC itself often point to alternative platforms of wireless,

^{72.} See Communications Assistance for Law Enforcement Act of 1994, Pub. L. No. 103-414, 108 Stat. 4279 (codified at 47 U.S.C. §§ 1001-1021) [hereinafter *CALEA*]; United and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, Pub. L. No. 107-56, 115 Stat. 272 (2001) (codified in scattered sections of 18, 47, and 50 U.S.C.) [hereinafter *PATRIOT Act*]. CALEA requires telecommunications carriers to assist law enforcement by making sure carriers have the necessary capability and capacity to permit electronic surveillance. By statute, CALEA access obligations do not apply to entities engaged in providing information services. Nor do they apply to cable modem service. The PATRIOT Act, however, does apply to ISPs and cable Internet providers. The FBI and DOJ have filed comments arguing against classifying wireline broadband as Title I.

See also 47 U.S.C. § 222 (imposing a duty on telecommunications carriers to protect the confidentiality of customer information); 47 U.S.C. § 225 (requiring common carriers to provide certain services for the hearing impaired); 47 U.S.C. § 255 (requiring telecommunications service providers to ensure that service is available to persons with disabilities).

[Vol. 2

satellite, and competitive local carriers, in fact they are of little present and uncertain future consequence. Despite the hype of Wi-Fi and the perennial hope of satellite, in fact none today offers meaningful nationwide platforms. There is in effect at best a duopoly for end user access and for ISP access. Currently ISPs have no legal rights to access the cable broadband network, apart from the limited merger conditions imposed by the FTC, which will expire. And in fact cable companies have not yet provided meaningful access. Unless this changes as either a legal or a commercial matter, as a practical matter ISPs are restricted to the wireline network. The FCC's elimination of line sharing should make it even more difficult for the Commission to conclude there are adequate alternative wireline platforms. If the FCC eliminates nondiscriminatory access to the wireline broadband network, then the ISPs will be restricted to whatever commercial terms they can strike with the Bells and the cable companies. Without additional rules protecting end user access to the network, the ability of application and content providers to reach customers may be further affected if only cable and telephone-affiliated ISPs are left remaining. The cable and telephone companies will have the ability to restrict access to the network to favor particular content or to keep off competing services such as Wi-Fi or VOIP. The question is whether they will have the incentive to do so.

Consistent with the ICE principle, discussed above, the Bells may have an incentive to keep as much traffic and customers on their networks as possible, and they may conclude that in order to accomplish this, they should make their networks available to independent ISPs.⁷³ Qwest for example, reports that it provides its residential broadband customers a choice of over 400 independent ISPs because this increases the value of its broadband service. The most likely market outcome is that the Bells will maintain some ISPs, if for no other reason than to avoid re-regulation. Some may retain only those that are weak enough that they do not pose a serious threat to the incumbent's own ISP service, others may retain a few that are attractive enough that they can capture additional customers, depending on their business strategy. Whether or not the Bells keep an open and "modular" system available to competing applications providers may be determined by the factors identified by Farrell and Weiser, discussed infra. The point is that it is not automatically or ineluctably the case that they will.

^{73.} See James Speta, Handicapping the Race for the Last Mile?: A Critique of Open Access Rules for Broadband Platforms, 17 YALE J. ON REG. 39 (2000) (strong indirect network externalities argue against imposing open access obligations on broadband networks, and the cable television model should be applied to all carriers deploying broadband information services).

The fact that there is a duopoly does not of course justify preserving the regulatory status quo. The point is simply that the incumbents' case for removing Computer Inquiry obligations is flawed. It certainly would be possible for the Commission to eliminate the specific Computer III ONA and CEI regimes, which are in many respects overly complicated and costly. But it will be more difficult for the agency to conclude both that (1) the underlying broadband transmission should continue to be classified as a common carrier service, and (2) that its forbearance authority justifies elimination of the core Computer Inquiry nondiscriminatory access obligation to information service providers or to further remove the core Title II prohibition against unreasonable discrimination in providing access to the network to end users.

The FCC could instead reclassify underlying broadband transmission as a Title I rather than a Title II common carrier service, but decide as a policy matter to impose some access (and other) obligations under its ancillary jurisdiction. There is much to recommend this approach from a policy standpoint. The structure of the Communications Act worked reasonably well so long as different platforms provided different service. This worked, not because the different platforms necessarily required different regulatory approaches (apart from spectrum issues), but because the need to regulate generally varied depending on the type of service. There are, for example, different policy imperatives for voice service than for television. If convergence finally occurs, which appears increasingly likely because of the coincidence of technological convergence and commercial pressure to bundle services, the Communications Act as currently structured will not facilitate the best regulation. It is unlikely, however, that Congress will undertake a wholesale rewriting of the Act any time soon. However, the Commission could in effect start from scratch, much as the EU has done, if it were to reclassify all broadband services as Title I, and then regulate from the ground up, asking questions of first principles regarding the need to regulate.

One weakness with this approach is that, given the current structure of the Communications Act, the Commission probably cannot avoid the need to evaluate whether a service should be regulated as a common carrier, a concept, that as currently defined, has either largely outlived its usefulness or must have some discipline and strictness reinstated either by the Commission or by the courts. And it may be difficult for the Commission to find—as it must in order to reclassify broadband transmission from a Title II to a Title I service—that there is sufficient competition in both the end user and the wholesale ISP market that the public interest does not require common carrier regulation, and then to reason—as it must to impose access requirements under its ancillary

jurisdiction—that the end user and wholesale ISP markets are insufficiently competitive that access or other competition related obligations are justified.

A second, and ultimately more serious problem, discussed in more detail in Section II, is that it is not at all clear that the courts would uphold the Commission's legal authority to impose competitive safeguards under its ancillary authority. Because the Commission could achieve much of the regulatory reform through its Title II forbearance authority, this may be a better, perhaps less elegant, but more disciplined and ultimately safer approach.

C. Nondominance Proceedings: Bells and All Customers

The FCC is also examining the appropriate regulatory treatment of incumbents' provision of broadband services that are regulated under Title II, looking in particular at what regulatory safeguards should apply when a carrier that is dominant in the local market also provides broadband service. Currently, the Bells are generally treated as dominant, including in the broadband market, and are thus subject to tariff filing, tariff support, and rate regulation, unless the Commission has found them to be nondominant, or lacking market power in a particular market, as it has in the long distance market.⁷⁴

In this proceeding, the Commission has undertaken a competitive market analysis of broadband services. As usual, the outcome will depend in large part on the definition of the relevant markets. If the geographic market is defined more narrowly than a nationwide market, that would likely lead to a finding that there is a duopoly at best and in many places a monopoly, at least for residential service. And if the product market is defined as transmission services made available to

^{74.} Regulatory Treatment of LEC Provision of Interexchange Services Originating in the LEC's Local Exchange Area, 12 F.C.C.R. 15756 (1997) (finding Bells nondominant in provision of interLATA services). The FCC has adopted the definition of market power to include where a carrier can profitably raise and sustain prices above competitive levels and thereby exercise market power in two ways.

First, a carrier may be able to raise prices by restricting its own output, which usually requires a large market share. Second, a carrier may be able to raise prices by increasing its rivals' costs or by restricting its rivals' output through the carrier's control of an essential input, such as access to bottleneck facilities, that its rivals need to offer their services. In assessing the first type of market power, the Commission traditionally has focused on certain well-established market features, including market share, supply and demand substitutability, the cost structure, size, and resources of the firm With respect to the second type of market power, the Commission has focused on the incumbent LEC's ability to exercise market power through its control of local bottleneck facilities.

Nondominance Proceeding, supra note 5, at 16-17, ¶¶ 28-29.

ESP/ISPs (as opposed to end user residential customers), then cable companies' market share would be trivial rather than majority. However, on the latter point, it would be difficult to justify continuing to regulate the Bells, but not their cable competitors because of the Bells' market share when their prevalence in that market is itself the product of regulatory asymmetry.

The significance of this proceeding has shifted somewhat over time. When it was initially pushed by SBC and others, its value was largely atmospheric. Incumbents were pursuing broadband unbundling relief both in Congress through the Tauzin-Dingell bill and later at the FCC through the Triennial Review. Being declared nondominant in the provision of broadband services would have helped set the stage for those efforts; it would have been more difficult for the Commission or Congress to continue to require the Bells to unbundle their broadband facilities once they found them to be nondominant in the provision of broadband services. The Bells having obtained the broadband relief they sought on that front, and then some, much of the wind is out of this sail, though there is still some immediate, practical relief the Bells would get by being declared non-dominant.⁷⁵

It is worth noting that as a threshold matter, much of the nondominance proceeding would effectively be mooted if the Commission declares broadband services to be Title I information services rather than Title II common carrier telecommunications services. The nondominance proceeding assumes a telecommunications service statutory classification, because to be subject to dominant carrier regulation, the service must as a threshold matter be a telecommunications service. So a finding that residential broadband services are information services would eliminate most dominant carrier regulation.

State regulation is not directly affected by the FCC's determination, because the FCC is assessing the market in services it classified as interstate. Though of course the federal agency's findings and analysis could have some persuasive force in state proceedings. The significance of this proceeding is primarily as one building block in the larger move toward deregulating wireline broadband services and facilities.

^{75.} Bells would get relief from the administrative costs of filing tariffs and providing cost support and responding to investigations, though this is relatively little as the cost support is not often scrutinized and tariff oppositions are rare. Bells stress the possibility of increasing revenues by being able to act more flexibly. Currently there is a 7 and 15 day waiting period before a tariff goes into effect, and Bells argue this hobbles their ability to act quickly in changing prices or offering new services. However, unless the FCC changes the current rules, being declared non-dominant would not relieve them of the core Computer Inquiry non-discriminatory access obligation as those apply to both dominant and nondominant providers.

D. VOIP: The Coda

Although not cited by the FCC as one of the broadband proceedings, the regulatory classification of voice over Internet protocol ("VOIP") is key to the final regulatory framework governing broadband communications. VOIP could be viewed as merely another enhanced service operated over the broadband network. But as the technology has improved, leading cable companies and traditional telephone companies have begun migrating to VOIP, and it appears increasingly likely that VOIP will eventually replace much of the circuit switched voice traffic that has been at the core of the common carrier regulatory regime. Thus the combination of how the FCC regulates VOIP and how it regulates underlying broadband platforms may determine the regulatory framework of information services and platforms in the future.

The issue of whether and how to classify and regulate VOIP has been percolating at the FCC for a number of years, and the agency deliberately and expressly has taken a position of benign neglect. It deliberately ducked the issue of how to regulate phone-to-phone internet telephony in the 1998 Stevens Report, the last time the Commission addressed the issue.⁷⁶ At the time, the agency's strategy was to defer ruling on VOIP until circuit-switched telephony regulations had been reformed, particularly access charges (the payments made by long distance carriers to the local carriers that originate and terminate a call) and contributions to the universal service fund. The European Union adopted a similar strategy, though using slightly different terms. The FCC was able to buy more time than officials originally expected in part because VOIP remained largely confined to international calls, where people were willing to accept lower quality of service in return for avoiding high international termination rates. However, as the quality of VOIP service has improved, the service has matured, so that large and established, rather then merely niche carriers, have begun to employ the technology. Thus, the issue of how to regulate VOIP is again before the Commission.77

^{76.} Federal-State Joint Board on Universal Service, *Report to Congress*, 13 F.C.C.R. 11,501 (1998) [hereinafter *Stevens Report*] (concluding that phone-to-phone IP telephony services "bear the characteristics of 'telecommunications services" but finding that it is not "appropriate to make any definitive pronouncements in the absence of a more complete record focused on individual offerings").

^{77.} ATT resurrected the issue by filing a petition with the FCC seeking a declaratory ruling that VOIP is an information service. AT&T charges that some incumbent local carriers are imposing access charges and seeks a ruling that its VOIP services are exempt from access charges. Petition for Declaratory Ruling that AT&T's Phone-to-Phone Telephony Services are Exempt from Access Charges, WC Docket No. 02-361. In a separate proceeding, a VOIP provider that characterizes its services as computer-to-computer rather than phone-to-phone VOIP has filed a petition for a declaratory ruling that its service is unregulated. Petition for

The agency faces many of the same issues as it does in the broadband classification proceedings. It must decide as a threshold matter how to classify the service: whether to impose common carrier regulations under Title II and exercise forbearance authority to remove certain obligations, or deem it to be an information service under Title I and invoke ancillary jurisdiction to impose obligations. As before, the key regulatory obligations the Commission must consider as a policy matter are universal service, access charges, and the collateral obligations such as public safety, law enforcement capability and consumer issues such as disability access.

One state, Minnesota, has recently put a stake in the ground by classifying VOIP as a telecommunications service, requiring the service provider, Vonage, to obtain state certification and otherwise be subject to state common carrier regulations.⁷⁸ If the state agency sticks with this position, or if others follow suit, the FCC will have to address the regulatory status of VOIP sooner rather than later, and may square off directly with the states. If the FCC refrains from classifying the service before a challenge to the state law makes its way to the courts, the reviewing court will find itself in the same situation as the courts in the cable open access proceedings—ruling without the benefit of the expert agency determinations. And then the FCC will once again be regulating against the backdrop of a court decision.

E. Moving Toward a Horizontal Regulatory Regime

The Commission has the opportunity in this set of proceedings to reform its regulatory framework in a way that more closely matches the current state of telecommunications services. For some time now, many Commission staff and commentators have recognized the inadequacy of the "vertical" or "silo" approach of both the Communications Act and the resulting regulatory regime. As new technologies and new services developed, Congress and the FCC under a vertical approach, developed particular categories of obligations and rights for each type of platform, which traditionally corresponded to a particular service—broadcasting,

Declaratory Ruling That pulver.com's Free World Dialup Is Neither Telecommunications nor a Telecommunication Service, WC Docket 03-45. The FBI and DOJ urge the Commission to hold the petition in abeyance until the Commission completes the cable and wireline classification proceedings.

The FCC's decisions in the general, but largely dormant proceeding examining major reform of intercarrier compensation may affect VOIP depending on its ultimate classification. *See* Developing a Unified Intercarrier Compensation Regime, *Notice of Proposed Rulemaking*, 16 F.C.C.R. 9610 (2001).

^{78.} Minnesota Public Utility Commission, Docket P6214/C-03-108, Issued Sept. 11, 2003, *available at* http://www.puc.state.mn.us.

common carrier telephony, cable television—and regulated each differently. This approach requires tortured and often unsatisfying definitional exercises, particularly as convergence developed, to decide in what category to place the service, and consequently what regulatory obligations to apply. Especially before Congress granted the FCC forbearance authority, all regulatory consequences turned on the results of this definitional exercise.

It has become popular more recently to call for a "horizontal" or "layered approach" to regulation.⁷⁹ This approach recognizes that a single technology or "platform," such as fiber, can provide multiple services, including voice, high speed data, and video programming. And that the same service, for example, voice telephone calls, can now be made using several different technologies, such as copper, fiber, radio spectrum, and cable plants. Generally, this approach divides the world into layers—physical and different applications or content—and takes a more functional approach to analyzing what regulatory treatment is appropriate. Thus, under this approach, voice traffic would be regulated the same regardless of the medium of transmission, unless there were some particular justification for particular treatment.

The European Union has adopted new legislation that restructured the regulation of electronic communications services and facilities in the Member States.⁸⁰ With a serious nod toward convergence of telecommunications, media, and information technology, the EU has adopted new laws that strive to impose a unified, single regulatory framework on all electronic communications and that rely more heavily on competition or antitrust law. Rather than linking regulation to particular services or technologies, the EU regulatory framework imposes remedies or safeguards "solely in markets where there are one or two undertakings with significant market power... and where national and

^{79.} See, e.g., Kevin Werbach, A Layered Model for Internet Policy, 1 J. ON TELECOMM. & HIGH TECH. L. 37 (2002); Douglas C. Sicker & Joshua L. Mindel, Refinements of a Layered Model for Telecommunications Policy, 1 J. ON TELECOMM. & HIGH TECH. L. 69 (2002); Rob Frieden, Adjusting the Horizontal and Vertical in Telecommunications Regulation: A Comparison of the Traditional and a New Layered Approach, 55 FED. COMM. L. J. 207 (2003). Unfortunately, commentators have used opposite terms for the same concept, so for example, Werbach characterizes the layered model as "vertical," while Frieden calls the same model "horizontal." I see the traditional technology specific model as a vertical one, and the so-called layered approach as horizontal, and use the terms accordingly.

^{80.} Directive 2002/20.ED of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services, 2002 O.J. (L 108)(Framework Directive); Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on Access to, and Interconnection of, Electronic Communications Networks and Associated Facilities, 2002 O.J. (L 108), *available at* http://europa.eu.int/information_society/topics/telecoms/regulatory/new_rf/text_en.htm# acc

Community competition law remedies are not sufficient to address the problem."81 Now, to be sure, even this model cannot escape altogether the need to draw lines between and around certain sets of services; in order to determine which companies have "significant market power" requires, of course, defining the relevant market. For example, in determining whether to impose sector specific regulation (as opposed to relying on general competition or antitrust law) on companies providing wireless service requires a determination of whether the relevant market is telephone service generally or whether there is a separate market for wireless service. And, echoing the themes of this paper, one of the most difficult issues faced by proponents of the legislation was the debate over the proper role of the Member States regulators. Nevertheless, the European model has much to recommend it. It is probably the most interesting experiment in regulatory reform occurring now, in part because it takes a mature set of industries and nearly starts from scratch, largely ignoring legacy regulatory status.

As some have noted, Computer Inquiry II took an early step in the direction of horizontal regulation by differentiating between the underlying physical network and the data processing services that ride over that network. But this was limited because it dealt with the only platform relevant at the time, the wireline network. If the FCC were to continue down the path it has started in the broadband classification proceedings, and sidestep historical and political constraints, it would go far toward constructing a more encompassing horizontal model of regulation.

The underlying layer would be the cable and wireline facilities, which the Communications Act, as implemented by the FCC, requires the telephone incumbents but not the cable companies to unbundle. The FCC reduced this discrepancy in the Triennial Review Order by essentially treating new fiber wireline networks the same as upgraded, two-way, broadband cable networks, requiring unbundling in neither case. The next level would be broadband transmission services, which the FCC is considering how to regulate in the pair of broadband classification proceedings, and which it has at least proposed to classify the same. The second stage of that inquiry will be whether to then impose equivalent obligations on both. The next level is ISP access, which is an unregulated interstate information service, whether provided

^{81.} Public Consultation on a Draft Commission Recommendation on Relevant Product and Service Markets within the Electronic Communications Sector Susceptible to Ex Ante Regulations in Accordance with Directive 2002/21/EC of the European Parliament and of the Council on a Common Regulatory Framework for Electronic Communication Networks and Services, *Commission of the European Communities Working Document, at* http://www.oftel.gov.uk/ind_info/eu_directives/draft_rec_relmar.pdf (June 17, 2002).

[Vol. 2

by cable or telephone companies. The next level would be voice service. At least for now, circuit switched voice service, offered over both cable and telephone lines, is regulated as a Title II service, with both making universal service contributions. When the Commission rules on the appropriate regulatory treatment of VOIP, it should apply the result equally to VOIP over cable plant as VOIP over the telephone lines, absent a relevant, specific distinction between the two. The next level could be video services. It is at this level that one confronts the fact that moving toward a horizontal model of regulation does not remove all classification problems. Currently, of course, cable television is regulated under Title VI of the Act. Currently telephone companies do not provide video service, but the Commission has ruled that when incumbents provide video programming services to end users, they do not need to provide that programming on a common carrier basis.⁸² In the cable modem classification NPRM, the FCC commented that "even if streaming video does achieve television quality, it would not be treated as a cable service unless it otherwise falls within the definition of 'cable service.""83 Throw in the historical and current political significance of over-the-air broadcasting, and this layer is apt to retain gerrymandered regulation for quite some time. But ultimately the agency should apply the same regulatory treatment absent a relevant difference, including any First Amendment considerations, between the platforms.

The largest obstacle to moving toward a fully horizontal and technology-neutral regulatory framework in the United States is, in fact, history and politics. And to be less cynical, a genuine desire on the part of policymakers to minimize regulation, even if it yields uneven regulatory treatment. One need only look to the FCC's rejection of an ISP's argument that Computer II nondiscriminatory access requirements should be imposed on cable to get a glimpse of the future. In the Cable Modem Classification Proceeding, Earthlink argued that it is irrelevant whether as an historical matter cable operators in fact offer transmission service on a stand-alone basis. EarthLink argued that the FCC *should* require them to offer a stand-alone transmission service and offer it to ISPs and other information service providers on a tariffed basis pursuant to the Computer II requirements. As the Commission characterized EarthLink's argument:

^{82.} Price Cap Performance for Local Exchange Carriers, Fourth Report and Order in CC Docket No. 94-1 and Second Report and Order in CC Docket No. 96-262, 12 F.C.C.R. 16642, 16715 ¶182 (1997) ("LECs are now permitted to participate in video markets as cable operators, through provision of common carrier video services, or as operators of non-common carrier 'open video systems."), aff'd in part and rev'd in part, USTA, 188 F.3d 521 (D.C. Cir. 1999).

^{83.} Cable Broadband Classification Proceeding, supra note 4, at 38, n. 236.

The reality is that information services can only be provided to the public over a common carrier telecommunications facility. In support of its arguments, EarthLink points to a line of decisions in which the Commission has required common carriers that provide information services to offer the underlying telecommunications as a stand-alone service.⁸⁴

The Commission's entire response to this argument is as follows:

These decisions are inapposite. In the cases relied upon by EarthLink and others, the providers of the information services in question were traditional wireline common carriers providing telecommunications services (e.g., telephony) separate from their provision of information services. Computer II required those common carriers also to offer on a stand-alone basis the transport underlying that information service. The Commission has never before applied Computer II to information services provided over cable facilities. Indeed, for more than twenty year, Computer II obligations have been applied exclusively to traditional wireline services and facilities. We decline to extend Computer II here. As we have found above, cable modem service providers currently offer subscribers an integrated combination of transmission and the other components of cable modem service. EarthLink invites us, in essence, to find a telecommunications service inside every information service, extract it, and make it a stand-alone offering to be regulated under Title II of the Act. Such radical surgery is not required.85

Or, in other words, "because I never said so."

Again, to be clear, criticizing an asymmetric regulatory regime says nothing about whether the correct direction is to increase or decrease regulation. Cable has never sold a wholesale transmission service, and arguably it would be wrong to impose a new service obligation on them. But the Bells sold transmission to ISPs under legal compulsion. Under the second prong of the NARUC common carrier test, one could make a case that there are few factors that would require a conclusion that the public interest requires the wireline broadband network be regulated as a common carrier, but not the cable broadband network.⁸⁶ But, again, as a matter of history and current politics, this probably will not happen.

^{84.} Id. at 27, ¶42 (internal citations omitted).

^{85.} Id. at 28, ¶43 (internal citations omitted).

^{86.} Indeed, Verizon has raised a First Amendment argument that may gain more force if telephone companies put more company selected content over their pipes. It argues that

Broadband transmission (together with the facilities used to provide it) constitutes a medium through which telephone companies are able to deliver a form of speech – the companies' own Internet and other content and services, possibly packaged with content from other sources or with commercial advertising and solicitations – to

One possible implication of moving to a horizontal approach is that the same company will be subject to multiple regulators: the local government for cable TV services, the states for intrastate phone service, the FCC for content, interstate voice, and advanced services. This is not really that different than the current situation for a platform provider that has chosen to provide multiple services. But as that becomes increasingly the rule rather then exception, it may call for rethinking the regulatory architecture.

II. IMPLICATIONS FOR STATES

The stakes are high in this set of proceedings. As a policy matter, the Commission is faced with the task of trying to locate the right balance of regulation (or deregulation) to spur investment in broadband without quashing innovation. It is striking that balance at a time when provision of broadband services is at a stage between monopoly and full competition. The policy challenge is how best to regulate a crossplatform duopoly. As a legal matter, the agency has embarked down a path in this set of proceedings where the ultimate consequences of reclassification are unknown.

their customers. It is no different in that regard from the pages of a newspaper, the screen at a movie theater or the bandwidth used by a cable operator to deliver its program guide and video programming Accordingly, if the Commission were to regulate cable operators under Title I while maintaining common carrier obligations on local telephone companies, both the Commission's reason for continued regulation and its reason for distinguishing between cable operators and local telephone companies would be subject to "intermediate scrutiny." A decision by the Commission maintaining Title II obligations on local telephone companies could not pass this exacting standard Nor could the Commission's decision to treat telephone companies differently from cable companies pass muster under the First Amendment. It is well settled that if a regulation affecting speech appears underinclusive, *i.e.*, where it singles out some conduct for adverse treatment, and leaves untouched conduct that seems indistinguishable in terms of the regulation's ostensible purpose, the omission itself is subject to heightened judicial scrutiny. It would be impossible for the Commission to justify a distinction between broadband services provided over the cable system platform and those using the telephone company wireline platform, given their relative market positions.

Ex Parte Comments of Verizon, filed in Cable Modem Proceeding, June 17, 2002, pp. 20-23 (internal quotation marks and citations omitted). However, it may be difficult for the companies to argue a First Amendment right for their broadband service at the same time they are asserting they exercise no editorial control over access to the Internet.

For discussions of platform-specific First Amendment review see 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 (2002); Jim Chen, Liberating Red Lion from the Glass Menagerie of Free Speech Jurisprudence, 1 J. ON TELECOMM. & HIGH TECH. L. 293 (2002).

The states had keen interest in the Commission's decisions regarding deregulation of local services and, for better or worse, achieved a policy role regarding narrowband facilities for voice service. But the FCC largely shut out the states from policy regarding broadband facilities. As the Commission turns to the classification of broadband services, states and local governments are identifying issues of concern. The concern in part goes to the fact that the states have been regulating (or not regulating) against the backdrop of certain longstanding federal regulatory schemes. Now some of those basic regimes are being called into questions. Based on interviews with a number of state commissioners, the concerns largely go to loss of state jurisdiction, full privatization of the telephone system, implications for universal service, and, finally, but probably of greatest interest, risk of loss of innovation.

A. Further Loss of State Jurisdiction Over Broadband

State regulators, who admittedly lack much legal jurisdiction under current law, but who have recently succeeded in flexing their political muscle in the context of the Triennial Review, support retaining Title II classification over wireline broadband transmission because they would have more arguments for retaining some residual jurisdiction over broadband services. Under current law, if the underlying broadband transmission service remains classified as Title II, and it has both an intrastate and an interstate component, the states can craft legal theories, under either their state telecommunications statutes, state consumer protection statutes, or through their authority under the Telecommunications Act of 1996 to arbitrate interconnection agreements, to seek to regulate broadband services, including the telecommunications services that may ride over them.

California asserts considerable jurisdiction under the heading of "service quality." For example, the state regulator considered a complaint filed by a coalition of independent ISPs, which alleged a violation of state service quality and nondiscrimination statutes. The incumbent telephone company, SBC, challenged the complaint on the ground that the state regulator lacks jurisdiction. The agency, however, ruled that it has jurisdiction because SBC's broadband affiliate is a "certificated CLEC" under the jurisdiction of the state.⁸⁷

According to press reports, Kentucky and Louisiana regulators are stepping in where incumbents have cut off DSL service to customers who are using competitors' voice service. BellSouth argued that the state regulator lacks jurisdiction to regulate DSL, but the regulator ruled that

^{87.} California ISP Assoc. v. Pac. Bell Tel., SBC, Advanced Solutions, *Complaint* C0107027, *available at* http://www.cpuc.ca.gov.

discontinuance of service under these circumstances thwarts local phone competition, which they regulate.⁸⁸

States will lose most of those admittedly slender jurisdictional reeds if the FCC reclassifies the transmission portion of broadband service as Title I and continues to preempt the states in regulating those services. While states could retain jurisdiction over *intrastate* advanced services, DSL is interstate if a connection is made to the Internet.⁸⁹

B. Falling Off the Cliff – Shift to a Private, Closed, And Unregulated Communications System

Some state regulators are even more concerned that the federal government is moving toward a regulatory regime that could eventually transform the nation's communications network, both facilities and services, into a private, closed, and largely unregulated one. As a result, the states could lose jurisdiction over even local voice service. Moreover, some states have been operating against the backdrop of protections afforded to enhanced service providers by the federal scheme and are concerned not only about lack of competition between network providers, but also lack of access to the remaining networks. For these regulators, their concern is that both end user consumers and intermediate enhanced service providers will have no regulatory protections and that full competition will not yet have emerged to provide the protections of a fully functioning market.

If the Commission's deregulatory broadband rulings in the Triennial Review ultimately are upheld, the end result will likely be further solidification of the broadband duopoly of cable and Bells.⁹⁰ This

90. Much depends on how quickly and how extensively the Bells invest in new fiber networks. Their initial public response was lukewarm at best. But over time they will deploy fiber, even if selectively, because this is their best hope for competing with cable. Verizon more recently said that in light of an FCC clarification of one aspect of its Triennial review decision relating to state approval of Bells' retiring copper facilities, it planned aggressive deployment of DSL and fiber, with a focus on suburban and rural customers, areas where policymakers have a greater interest in promoting broadband services. State regulators no doubt noted Verizon's qualification that specific state-by-state deployment plans will depend on the particular investment environment in each state, which is code for the states' decision

^{88.} New Phone Twist: Switch Local Service, Lose DSL, WALL ST. J. ONLINE, Jan. 30, 2003.

^{89.} In some states, such as Oregon, the incumbent initially filed an intrastate tariff for DSL service. This would seem to acknowledge (or confer) state jurisdiction. However, the incumbent subsequently filed interstate tariffs with the FCC, and its DSL sales are made from its interstate, not the state tariff. In theory, the incumbent could sell DSL service from its state tariff if the service did not connect to the Internet, which in the view of the FCC makes it an interstate service. DSL without Internet connection is an unlikely situation, except for businesses that might wish to have a high speed connection available for its employees to connect to the company's local area network. But for the mass market, DSL without Internet is useless.

means that the two main underlying facilities into the home, cable and incumbent telephone companies, may be unavailable to companies seeking to provide competitive service. If the FCC classifies both integrated Internet access/broadband transmission, and the telecommunications component of that service as Title I, then this places broadband services of both cable and wireline outside the reach of both state and federal regulators except to the extent that the FCC seeks to impose certain requirements pursuant to its ancillary jurisdiction.

However, the legal question of how far the FCC can go in imposing any obligations on broadband providers under its ancillary jurisdiction is far from settled once the FCC has declared the underlying transmission to be neither cable nor common carrier services. To be sure, courts were sometimes quite generous in interpreting the FCC's ancillary jurisdiction, but the trend appears to be a narrowing in the recognition of ancillary jurisdiction. Prior to Congress enacting laws governing cable television, the Supreme Court upheld the FCC's jurisdiction to regulate cable as "ancillary" to its authority to regulate (and protect) broadcasting. In United States v. Southwestern Cable Co.91 the Supreme Court rejected the argument that the FCC lacked jurisdiction to regulate cable television systems, which were neither common carrier, and thus outside Title II, nor broadcasters, and thus outside Title III. The Court found that in 1934, Congress "acted in a field that was demonstrably 'both new and dynamic,' and it therefore gave the Commission 'a comprehensive mandate,' with 'not niggardly, but expansive, powers.""92 The Court concluded that the agency's authority in such circumstances is restricted to that "reasonably ancillary to the effective performance of the Commission's various responsibilities for the regulation of television broadcasting," and, ironically from today's policy perspective, the Court upheld the FCC's jurisdiction over cable because the FCC had found that broadcasters were jeopardized by the "unregulated explosive growth" of a new competitor, cable television.⁹³ Thus, the court found that, even where it lacks precise and express statutory authority, the FCC has authority to regulate ancillary to a general statutory goal or policy.

regarding whether they will make UNE-P available to competitive local carriers as a result of their analysis of unbundled network elements pursuant to the FCC's Triennial Review Order. Verizon Press Release, March 19, 2003. Fiber deployment will happen gradually and will not likely ever be available to all households because rewiring the country with fiber is so expensive. Corning, Inc. a major fiber maker, has estimated that it would cost \$360 to \$660 billion. *Despite Winning Ruling, Bells Shirk DSL Investment Pledge*, WALL ST. J. ONLINE, Feb. 21, 2003.

^{91. 392} U.S. 157 (1968).

^{92.} Id. at 157 (quoting Nat'l Broad. Co. v. United States, 319 U.S. 190, 219 (1943)).

^{93.} Id. at 158, 175.

In an even more proximate context, courts upheld the agency's ancillary jurisdiction in upholding certain of the FCC's Computer Inquiry rules. In *Computer and Communications Industry Assoc. v. FCC*, ("*CCIA*"),⁹⁴ the Court of Appeals for the D.C. Circuit upheld the FCC's ruling in Computer II to classify data processing services and consumer premises equipment as falling within Title I and to regulate them under the FCC's ancillary jurisdiction.⁹⁵ The court upheld the FCC's assertion of its ancillary jurisdiction over customer premises equipment, which the FCC had ordered must be sold separate from basic communications in a competitive market.⁹⁶ The court also upheld the FCC's assertion of ancillary jurisdiction over enhanced services as incidental transmissions over interstate telecommunications.⁹⁷

In a recent case striking down the FCC's rules requiring "video description" services for the disabled community, however, the D.C. Circuit of Appeals rejected the agency's assertion of ancillary jurisdiction.⁹⁸ In *MPAA*, the court rejected each of the FCC's arguments for jurisdiction.⁹⁹ In particular, in rejecting the FCC's invocation of section 4(i) as a source of jurisdiction, the court quoted Chairman Powell's statement, dissenting in part from the FCC's order.

Chairman Powell's discussion of this provision says it all:

It is important to emphasize that section 4(i) is not a standalone basis of authority and cannot be read in isolation. It is more akin to a 'necessary and proper' clause. Section 4(i)'s authority must be 'reasonably ancillary' to other express provisions. And, by its express terms, our exercise of that authority cannot be 'inconsistent' with other provisions of the Act. The reason for these limitations is plain: Were an agency afforded *carte blanche* under such a broad provision, irrespective of subsequent congressional acts that did not squarely prohibit action, it would be able to expand greatly its regulatory reach.

We agree.¹⁰⁰

The court's opinion could reasonably be interpreted as confined to cases involving programming, which as the court emphasizes, raise First

^{94. 693} F.2d 198 (C.A.D.C 1982).

^{95.} Id. at 213.

^{96.} Id.

^{97.} Id.

^{98.} Motion Picture Assoc. of Am. v. FCC, 309 F.3d 796 (D.C. Cir. 2003) (MPAA).

^{99.} Id. at 807.

^{100.} Id. at 806 (internal quotations omitted), quoting 15 F.C.C.R. at 15,276 (Powell, dissenting).

Amendment concerns. But a more recent decision, involving telecommunications and not programming, can fairly be read as extending the MPAA court's narrow reading of the FCC's ancillary jurisdiction. In AT&T Corp. v. FCC,¹⁰¹ the D.C. Circuit vacated an FCC forfeiture order imposing a fine against AT&T for "slamming" two customers. The court held that the Commission's requirement that carriers guarantee that the actual subscriber has authorized the service change order exceeded the Commission's statutory authority to prescribe procedures to verify that authorization. In a very narrow reading of the Commission's statutory authority, the court cited MPAA for the proposition that the FCC's interpretation of the Communications Act is not entitled to deference "absent a *delegation of authority* from Congress to regulate in the areas at issue."¹⁰² However, during oral argument in Cellular Telecommunications v. FCC, when counsel for petitioners challenging the FCC's ancillary jurisdiction to impose wireless number portability cited AT&T v. FCC as evidence that MPAA applies outside the context of cases raising First Amendment issues, Judge Tatel, who authored AT&T v. FCC, said that is not what the case stands for.¹⁰³ This could suggest that AT&T's reference to MPAA is confined to narrow constructions of a particular statutory delegation of authority, rather than to how close the link must be between ancillary authority and the particular statutory authority to which it is tied. But this could just be another way of phrasing the same issue-how expansive can the agency be in interpreting the scope of its delegated authority. Can it act pursuant to a general statutory goal or policy, as the Court permitted in Southwestern Cable, or must the agency link its action to a more precise and express statutory authorization as the court required in the more recent MPAA and AT&T.

Even in the earlier *CCIA* case, the court's opinion is best understood as requiring that the agency exercise its ancillary jurisdiction only when it is ancillary to another express statutory authority. The Court framed the analysis as posing only the issue of "whether the Commission's discretion extends to deciding *what regulatory tools to use in regulating common carrier services.*^{"104} In upholding the FCC's exercise of ancillary jurisdiction over customer premises equipment and enhanced services, it specifically recognized that the assertion of ancillary jurisdiction under Title II to protect ratepayers who are paying for services whose rates were regulated under Title II and might be affected

^{101.} AT&T v. FCC, 323 F.3d 1081 (2003).

^{102.} Id. at 1086 (citing MPAA, 309 F.3d at 801) (emphasis in original).

^{103.} Oral argument attended by author.

^{104.} CCIA, 693 F.2d 198, 212 (D.C. Cir. 1982).

[Vol. 2

by AT&T's provision of enhanced services and customer premises equipment.¹⁰⁵

Whether a reviewing court would uphold the FCC's exercise of ancillary jurisdiction to impose certain obligations on broadband services depends of course on the specific obligations the FCC would impose. Agency imposition of CALEA law enforcement obligations, for example, may be justified differently than Computer Inquiry access obligations. But it should also depend on whether the court adopts the approach of Southwestern Cable and permits agency action in pursuit of a general statutory goal or purpose or whether it instead requires the agency to identify an express statutory provision, as the courts seemed to require in CCIA, MPAA and AT&T. If the latter, it is not clear to which regulated service the FCC would be tagging its ancillary jurisdiction. The FCC could argue that its jurisdiction is ancillary to its responsibilities under 706 of the Act, which directs the Commission to "encourage the deployment on a reasonable and timely basis of advanced telecommunications capability ... by ... regulatory forbearance, measures that promote competition in the local telecommunications market or other regulating methods that remove barriers to infrastructure."106 But if the FCC seeks to impose any access obligations on the Bells providing broadband services, this will be vulnerable because, in order to justify reclassifying broadband transmission from a Title II to a Title I service, the FCC will have to perform an analysis that concludes that the market is sufficiently competitive that it would not justify, under NARUC, imposing a common carrier classification. Having done so, it would then be difficult for the agency to construct a rationale for imposing access and certain other obligations related to competition concerns on the same network.

If the FCC gambles on this approach of reclassifying broadband services as Title I and imposing obligations under ancillary jurisdiction, and then loses in court, the agency will be boxed into a corner if it later seeks to reverse course and argue that broadband transmission should be classified as common carrier service after all. If the Commission makes this bet and loses, *and* if it classifies VOIP as a Title I service, then the "jeremiad" vision of a telecommunications platform largely outside of either state or federal regulation might come to pass, and it would take

^{105.} *Id.* at 213 (Regulation of enhanced services is necessary "to prevent AT&T from burdening its basic transmission service customers with part of the cost of providing competitive enhanced services . . . Likewise we believe the Commission acted reasonably in ordering, pursuant to its ancillary jurisdiction, that CPE be removed from tariff. The Commission found that bundling CPE charges into transmission rates has a direct effect upon rates for interstate transmission services.").

^{106.} Pub. L. No. 104-104, Title VII, § 706, 110 Stat. 153 (reproduced in notes at 47 U.S.C. § 157) (Section 706).

Congress to step in and pass new legislation to re-regulate the telecom industry.¹⁰⁷ Given all the factors that would have to align, this is, at the end of the day, probably a remote possibility, and the FCC would try to avoid this outcome or step in to re-regulate. However, it is not certain that the courts would let them once they classified the underlying transmission as Title I.

C. Impact on the Universal Service Fund.

The states are concerned about the impact of the classification proceedings on the universal service program. The federal program is funded through contributions based on a percentage of end-user revenues from interstate (including international) telecommunications services.¹⁰⁸

^{107.} This scenario depends on VOIP finally emerging as a mainstream rather than a niche domestic phone service; an emergence that has been predicted for many years, but has not yet materialized. *See supra* note 78 and accompanying text (there is some evidence that the service may be maturing). And a public statement by former U.S. Representative Tom Tauke, who now leads Verizon's public policy, may be even more indicative of the future of VOIP. He is quoted as advocating that if competitors such as AT&T, Microsoft, or Earthlink offer VOIP as part of bundled broadband package, it should not be regulated as a telecommunications service, even if that means a regulatory disparity between his company and the VOIP upstarts. MULTICHANNEL NEWS, *NCTA Weighs in on IP Telephony*, Feb. 3, 2003. It seems fair to assume that Verizon would not accept this disparity for long, and instead expects to migrate to VOIP service.

The apocalyptic vision has been dismissed by some who claim that state regulators would retain jurisdiction over VOIP providers because the VOIP providers need access to phone numbers and this requires them to become "certificated" carriers under the jurisdiction of state regulators. This is not necessarily true, however, as VOIP providers can and do buy phone numbers from other telecommunications carriers, avoiding the need to register with the state.

Some have argued that the government could lose jurisdiction of the communication system even without the rise of VOIP. Professor Rob Frieden and MCI have argued that companies may be able to exploit the FCC's reclassification of the wireline broadband network to Title I by bundling traditionally regulated common carrier voice service with an unregulated information service. Under the FCC's tradition of treating hybrid enhanced/basic services as enhanced, unregulated services, and its "subordination" of the telecommunications functionality when coupled with an information service, Professor Frieden warns that this appears to offer "telecommunications service providers the ability to free themselves of any and all common carrier burdens that otherwise would apply to broadband telecommunications service simply by characterizing these offerings as information services." See Frieden, supra note 79, at 234; MCI ex parte, Wireline Classification Proceeding, July 21, 2003. Although the Commission is likely to go to great lengths to avoid this result, its tradition of treating "information service" and "telecommunications service" as mutually exclusive categories of service, see Stevens Report, supra note 76, at 11,520, ¶39, combined with the cable and telephone industries' move toward bundling services into integrated packages, will make the Commission's task more difficult.

^{108. 47} U.S.C. § 254. The states are also concerned about the impact of VOIP on universal service. The association of state regulators, National Association of Regulatory Utility Commissioners, Board of Directors adopted a resolution cautioning that "A decision by the FCC... to declare all phone-to-phone calls over IP networks to be information services by virtue of the technology could have negative effects on various telecommunications policies,

As with the nation's social security system, the universal service program, which subsidizes rural telephony, service to low income persons, and Internet access for schools, libraries, and rural health care, is running out of money. The immediate threat to the fund is that it is supported primarily by declining long distance revenues. The Commission has initiated a proceeding to consider various ways to reform the program to maintain its viability.¹⁰⁹

Currently, cable companies make contributions based on revenues from circuit-switched telephone service provided over the cable network, but they do not contribute on revenues from cable modem Internet access. In contrast, telephone companies contribute to USF based on revenues from their broadband services, including integrated internet access and DSL service, and from standalone DSL transmission provided to affiliated or unaffiliated Internet service providers and to end-users.¹¹⁰

Reclassifying wireline broadband from Title II to Title I would raise the issue of the continued obligation of wireline broadband providers to contribute to universal service, and would throw into sharp relief the disparate treatment of Internet access provided over cable versus the telephone network.¹¹¹ The problem facing the FCC is as much one of policy and politics as of law, but even so, the agency will have to justify different treatment of different Title I services.

Although section 254 is part of Title II, and it directs telecommunications carriers that provide interstate "telecommunications services" to contribute to universal service, the FCC has interpreted section 254(d) to provide it authority to collect contributions from "[a]ny other provider of interstate telecommunications" ¹¹² if the public interest so requires. The statute should be interpreted as providing the FCC the

including universal service, and might be inconsistent with the 1996 Act." NARUC, *Resolution Relating to Voice Over the Internet Telecommunications*, Feb. 26, 2003, *available at* http://www.naruc.org/Resolutions/2003/winder/telecom/voice_over.shtml.

^{109.} Federal-State Joint Board on Universal Service, CC Docket Nos. 96-45, 98-171, 90-571, 92-237, 99-200, 95-116, *Notice of Proposed Rulemaking*, FCC 01-145 (May 8, 2001); FCC Takes Next Step To Reform Universal Service Fund Contribution System, CC Docket Nos. 96-45, 98-171, 90-571, 92-237, 99-200, 95-116, *News Release*, FCC 02-43 (Feb. 14, 2002).

^{110.} See Wireline Broadband Classification Proceeding, supra note 4, at 33, ¶72.

^{111.} As of 2001, about one-third of states report requiring contributions to a state universal service fund based on revenues from advanced services. Federal classifications may affect states' abilities to impose state universal service contributions. *See* National Regulatory Research Institute, *State Regulatory Commission Treatment of Advanced Services: Results of a Survey*, March 2001, *available at* http://www.nrri.ohio-state.edu/.

^{112.} See Wireline Broadband Classification Proceeding, supra note 4, at 33, ¶71, quoting § 254(d).

necessary legal authority to broaden its base of universal service contributors to include revenue from broadband services.¹¹³

Even so, if the Commission reclassifies wireline broadband transmission as Title I and retains the USF contribution under its permissive authority, it will have to justify why it imposed USF obligations on some Title I providers and not others. This may be particularly difficult to do if we get to a point where both cable and telephone companies are providing broadband transmission services on a standalone basis to unaffiliated ISPs and only one is saddled with a USF obligation. It will also force the Commission to justify why it imposes USF obligations on broadband service providers, but not other information services such as airline reservation systems, instant messaging, and web hosting providers. The agency will have to uphold such distinctions against challenges that they are arbitrary and therefore impermissible. The more difficult question for the FCC will be whether to remove broadband internet access provided over the telephone network from the contribution base for USF or whether to extend USF obligations to other providers of broadband services, particularly cable, but also to Wi-Fi or satellites.

D. Threat to Innovation and Speech.

States are also monitoring the network neutrality or consumer connectivity issue.¹¹⁴ An ACLU White Paper dramatically warns:

The Internet as we have known it is going to change – the only question is how. There's a fight going on over that question, and at stake is nothing less than the Internet's potential as a medium for free expression, civic involvement and economic innovation. Driving the change is the ongoing conversion by consumers from a dial-up Internet (based on slow modem connections over phone lines) to far faster "broadband" connections (mostly using cable modems). With dialup, Internet access is provided over a medium that provides open, equal access to all: the telephone system. But with the shift to cable,

^{113.} See Stevens Report, supra note 76, at 11,541, ¶81 (concluding that facilities-based ISPs that provide no stand-alone telecommunications services could be required to contribute to universal service under the agency's permissive authority). See also Federal-State Joint Board on Universal Service, Report and Order, 12 F.C.C.R. 8776, 9183-84, ¶¶ 794-97 (1997) (requiring payphone aggregators to contribute to universal service).

^{114.} See, e.g. LESSIG, supra note 38; LAWRENCE LESSIG, CODE AND OTHER LAWS OF CYBERSPACE (1999); No Competition: Now Monopoly Control of the Broadband Internet Threatens Free Speech, ACLU White Paper, (rel. summer 2002), available at http://archive.aclu.org/issues/cyber/NoCompetition [hereinafter ACLU White Paper]; Ex Parte, Coalition of Broadband Users and Innovators, Jan. 28, 2003, Wireline Broadband Classification Proceeding.

Internet access must be adapted to a medium that has been far more subject to centralized control.¹¹⁵

An ACLU and Center for Digital Democracy sponsored study reports various ways a cable company providing Internet access could interfere with online activities, often in ways that they claim are invisible to customers, including control over applications (such as VOIP and virtual private networks), control over access to content (such as slowing access to sites that have no financial arrangement with the cable company), ability to promote certain content (presumably its own), and the ability to violate privacy (citing Comcast's short-lived practice of tracking customers' web browsing without their consent).¹¹⁶ Although the ACLU emphasizes cable networks, the same applies to the wireline network, although currently perhaps with less force from the standpoint of the ACLU because, unlike cable broadband providers, incumbent telecos generally do not now carry their own content over their broadband networks.

One coalition promoting network neutrality, the Coalition of Broadband Users and Innovators (CBUI), has warned against the danger that "the longstanding principles of network neutrality and consumer connectivity, which have existed for decades in the wireline context, may not be carried forward into the broadband era."¹¹⁷ They express concern that innovation will be stifled if content and equipment providers are uncertain whether their new offerings will be accessible on the Internet. Although they cannot document any evidence that discrimination has occurred, they point to technology that allows network operators to discriminate and to restrictive provisions that appear in broadband subscriber agreements. (Network owners in turn have pointed to similar restrictions in some of the coalition members' own agreements.) Network neutrality advocates claim that broadband providers may discriminate in favor or against certain content or restrict subscribers' ability to use technologies such as VOIP or Wi-Fi that may compete

^{115.} ACLU White Paper, supra note 114, at 1. The ACLU would probably have cited a subsequent short-lived flap over cable network Comcast's refusal to air a commercial protesting going to war in Iraq during CNN's coverage of President Bush's State of the Union speech. According to press reports, the company said it rejected the ad, which charged that the war would be a violation of international law for being conducted by mercenaries, because it could not substantiate the claims in the ad, inviting the obvious question of how many of the claims in their other ads the cable company could substantiate. See FCC Chairman Ho-hums Anti-War Ad Controversy, ADAGE.COM, at http://www.adage.com (Jan. 29, 2003).

^{116.} ACLU White Paper, supra note 114, at 4-6.

^{117.} Ex Parte filed in Wireline Broadband Classification Proceeding and Cable Modem Classification Proceeding, Covington & Burling, January 29, 2003. Identified members of the Coalition of Broadband Users and Innovators include Microsoft, Amazon.com, Yahoo!, Consumer Electronics Association, Media Access Project, and eBay.

with core revenue sources of the cable or telephone companies. CBUI urges the FCC "endorse" four principles of consumer connectivity:

- (1) Consumers should have unrestricted access to their choice of Internet content using the bandwidth capacity of their service plan.
- (2) Consumers should be able to run applications of their choice, as long as they do not harm the network, enable theft of service, or exceed the bandwidth limits of their subscribed-to service.
- (3) Consumers should be permitted to attach any devices they choose, without prior permission, to the network, so long as they do not harm the network, enable theft of service, or exceed the bandwidth limits of their subscribed-to service.
- (4) Consumers have a right to meaningful information regarding technical limitations of their service.¹¹⁸

The CBUI position represents a shift from the ISP's call for government mandated open access to *competitors* to a call for government mandated open access for *consumers*. This places the debate on grounds that may give states some more arguments for jurisdiction.

States weighed in on the policy debate when NARUC adopted a resolution that echoed the themes of the importance of open broadband access to citizens' access to information. The NARUC Resolution recognizes the technical capability of broadband service providers to direct customers to preferred content, and advocated that "all Internet users, including broadband wireline and cable modem users should: (1) Have a right to access the Internet that is unrestricted as to viewpoint and that is provided without unreasonable discrimination as to lawful choice of content (including software applications); and (2) Receive meaningful information regarding the technical limitations of their broadband service."¹¹⁹ Alternatively, if the broadband provider allows

^{118.} Ex Parte filed in Wireline Broadband Classification Proceeding and Cable Modem Classification Proceeding, CBUI, Mar. 31, 2003, p. 3 of attachment. Amazon.com and another coalition, the High Tech Broadband Coalition, have proposed different solutions, including continued nondiscriminatory ISP access for a limited period of time or the cable and wireline owner electing either to assure that its ISP observe certain principles ensuring access and neutrality or making available at least three independent ISPs to their subscribers. *See* Reply Comments of High Tech Broadband Coalition, filed in Cable Modem Classification Proceeding, July 1, 2002; Ex Parte, Cable Broadband Access Proceeding, Amazon.com, filed Dec. 2, 2002.

^{119.} NARUC Resolution, supra note 38.

nondiscriminatory ISP access, the affiliated ISP may promote particular content.

As discussed above, the FCC is unlikely to impose "consumer connectivity" rules on the cable industry in the absence of a record that establishes that the conceived harms are real rather than speculative. In deciding whether to maintain or impose consumer access safeguards for the telephone network, the agency is not required to choose between its goals of deregulation and regulatory parity. In this case, they could coincide.¹²⁰ The Commissioners are likely to issue a warning that they will keep an eye on the situation and consider imposing consumer safeguards if a pattern of discrimination develops. Of course, having concluded that sufficient competition in broadband platforms exists to justify classifying cable or wireline broadband transmission as non-common carrier might reasonably lead the agency to conclude that the network providers should be free to discriminate as they see fit. This, however, is not a good headline.

In the absence of federal action, some states, particularly following the NARUC resolution, will consider their appropriate role. They may well conclude that the level of attention given by public interest groups and federal policymakers will serve as a sufficient deterrent, at least in the short run, to significant action to discriminate in favor or against particular applications or content.¹²¹ They may also refrain from acting in an area where their jurisdiction is incomplete; even if they succeed in arguing for jurisdiction to impose consumer access safeguards on one platform, such as wireline broadband, they may fail in others, such as cable and satellite. Finally, some consumer access advocates may persuade states not to act because they may prefer a loss at the national level that results in a uniform (although negative) result than to win in some states if that means uneven results. Alternatively, some states may consider replicating the approach some local governments took

^{120.} Locating the precise source of existing consumer access safeguards is not a simple or certain matter. Integrated transmission/Internet access service is probably now and soon shall expressly be declared to be a Title I service, with no concomitant consumer access rights. For dial up Internet access services, end user customers have the benefit of common carrier access rights under Title II to the phone line. For broadband internet access, consumer access safeguards would be grounded in the Computer Inquiry rules, which arguably apply to all users, not just enhanced or information service providers. If the Commission eliminates the Computer Inquiry safeguards in the wireline classification proceeding and declares the underlying transmission a Title I service, it could eliminate the only source of consumer access to broadband internet access.

^{121.} If the ACLU study, *infra* note 114, is correct and the cable companies have the ability to discriminate without subscribers knowing it, then it raises the question of how the FCC will be able to monitor the situation, vigilantly or otherwise. But if this is so, then rules prohibiting discrimination may have limited impact because enforcement will be difficult.

(ultimately unsuccessfully) with competitor access to the cable network and seek to impose safeguards at the state level.

Arguably, this may be precisely one of those areas where we should encourage or at least permit experimentation at the state level. The nation's economic growth will continue to depend on information services and as our networks migrate to broadband, ensuring innovation in this area will be a necessary condition for economic growth. And the principles of free expression and civic involvement articulated by the ACLU, if a bit hyperbolically, are appropriate subjects of state consideration. What is uncertain at this point is whether a government mandated consumer access obligation will promote any of these goals.

To the degree this is an empirical question, we may be better off permitting the states to act as social and economic laboratories of democracy.¹²² What we are talking about is the health of a competitive market and the predicates for innovation, and arguably where there is so much uncertainty regarding the risks associated with both government action and government inaction, the optimal response would be to allow different approaches to develop until we gain better knowledge.

Lemley and Lessig's argument for requiring ISP access applies equally, or perhaps more forcefully here:

A... problem with the 'wait and see' approach in this context is that it is not at all clear that we will see the costs of eliminating ISP competition. It may be impossible to measure the loss of innovation that results from stifling ISP competition and regularizing innovation along the lines of what cable companies think is optimal. Any ex post assessment will face the difficult problem of evaluating a negative – what things didn't happen as a result of this change.¹²³

One way to ask the question is whether the risk of a "Type I" (false positive) error is worse than a "Type II" (false negative) error—in other words are we worse off forcing network access or neutrality when there was no risk of harmful discrimination or are we worse off failing to identify a true harm that results from allowing network owners to

^{122.} New State Ice Co. v. Liebmann, 285 U.S. 262, 311 (1932) (Brandeis, J. dissenting) ("To stay experimentation in things social and economic is a grave responsibility. Denial of the right to experiment may be fraught with serious consequences to the Nation. It is one of the happy incidents of the federal system that a single courageous State may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country.").

^{123.} 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, 956-57 (2001); *see* California v. FCC, 4 F.3d 1505, 1515 (9th Cir. 1993) ("[T]he FCC is entitled to adopt a wait and see approach" to potential problems that may or may not materialize.).

[Vol. 2

discriminate. Which is worse—a false alarm, or a failed alarm. And what is the likelihood of each.

Failing to detect and address the risk that cable and telecom broadband providers will restrict broadband use and thus stifle innovation poses a greater harm than imposing an unnecessary governmental rule. It is the innovation that does not happen that is the cost of government inaction. If the rule merely proves to be unnecessary because the companies owning the two main paths into the home do not now and would not in the future discriminate in user access, then safeguarding against the risk may be the wiser policy choice. If, however, imposing the consumer access provisions chills investment by the companies providing broadband access or somehow leads to higher prices to consumers, which in turn deters broadband adoption, then it would be more difficult to justify allowing state experimentation. However, if companies fail to invest (or keep prices high) because they will not reap the rewards of making selective (that is, discriminatory) decisions regarding how their network is used, including the packages of services provided over the network, then this does not lead to the conclusion that policy makers should keep an eye on the situation and act only where they see real examples of discrimination. Instead, it may suggest that the government should fix its gaze elsewhere because network owners should be allowed to control or discriminate in the use of their networks. This of course applies to regulation at both the state and the federal level.

The difficulty comes in part from the fact that most would accept that if this were truly a fully competitive market, and if ISPs and users and content providers had recourse to multiple platforms, then we should perhaps allow those platform owners to discriminate to their hearts' content. Conversely, if there is a monopoly in the ability to access the home, as there was when the FCC conducted the original Computer Inquiry proceedings, then access safeguards make more sense. The situation is far less clear when, as now, there is a duopoly.

Congress created a regulatory regime that allows a role for both federal and state regulators. One commentator has developed the theme of cooperative federalism, arguing that in the context of telecommunications policy, complete uniformity across states on certain issues may be both an "undesirable and unattainable goal."¹²⁴ In Section 706, the provision of the 1996 Act that specifically addresses the role of agencies in promoting broadband services, Congress looked to both the FCC and state agencies to promote broadband development, though

^{124.} Philip J. Weiser, Chevron, *Cooperative Federalism, and Telecommunications Reform*, 52 VAND. L. REV. 1, 4 (1999).

with a set of tools that probably does not include consumer access rules. $^{125}\,$

However, it may be undesirable to create a legal system that allows for so much fragmentation. One of the reasons to require decisions of nationwide applicability for rules affecting the Internet may be the economies of scale that are necessary to promote hardware and software research and development. CBUI argues that companies will not invest in research of Internet applications if they cannot be assured of Internet access. But if only California and a handful of other states ensure, for example, that customers can attach Wi-Fi equipment or use VOIP software, it may be the safeguards are insufficient to support commercial investment. This only means, however, that the state safeguards were insufficient, not necessarily that they were harmful. Regarding access to content, many will no doubt argue that state variability could lead to an unworkable system if consumers in some states, but not others, are legally entitled to unrestricted access to their choice of content. Although, on the other hand, nothing now prevents different countries from approaching this or other issues in different ways, and the Internet is a global, not a national network. Some may argue that the Internet would function even better globally if there were uniform international rules. But for many of the differences that are causing consternation, such as particular countries prohibiting certain content, the situation would not be improved by a harmonized rule that restricted access to the Nevertheless, of course, if a compelling (and not just content. theoretical) case could be made that a patchwork system of regulation in itself causes significant harm, a theoretical risk of harm to innovation from discriminatory access would not justify state governmental action.¹²⁶

^{125.} Section 706(a) of the Telecommunications Act of 1996 provides:

The Commission and each State commission with regulatory jurisdiction over telecommunications services shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans (including, in particular elementary and secondary schools and classrooms) by utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment.

If state agencies were to invoke 706 as the basis of jurisdiction in imposing some form of consumer connectivity rules, as opposed to jurisdiction under their own state laws, they would have to make an argument that removing the ability of private network owners to control their networks somehow removed a barrier to infrastructure investment, and this would be an exceedingly difficult argument to make.

^{126.} By way of comparison, many observers are critical of the agency's decision in the Triennial Review to leave sufficient fact-finding and perhaps policy-making authority in the hand of state agencies, in part because the inevitable result is different treatment from state to state regarding whether competitive local carriers can provide local phone service over a platform available at the cheaper regulated rates. However, uneven results in this context may

Before the FCC expressly preempts the states from taking action and before individual states regulate in this area, there should be additional study, preferably with input from economists, network providers, and the academic community to identify the ramifications of state by state regulation.

As a legal matter, however, the states face an uphill battle if they seek to regulate in this area without the FCC carving out room for state experimentation. Apart from section 706 of the 1996 Act, and in contrast to the federal-state role in determining unbundling of and access to the local telephone network at issue in Triennial Review, Congress did not give states a role in developing policy or implementing federal law regarding broadband.¹²⁷ States could argue that their jurisdiction does not require an express grant from Congress. But they then face the obstacle that the FCC, largely with the approval of the courts, has largely preempted the states from regulating "information services."

In a series of cases reviewing the FCC's Computer III orders,¹²⁸ the Ninth Circuit analyzed the FCC's preemption of state regulation of enhanced services. In *California I*, the court reviewed the FCC's preemption of state regulations that required the Bells to provide enhanced services through a separate affiliate. The court applied the Supreme Court's preemption doctrine of *Louisiana Public Service Commission v. FCC ("Louisiana PSC")*. ¹²⁹ In *Louisiana PSC*, the Supreme Court, acknowledging the tension between the broad jurisdiction given to the FCC in section 151 and the express reservation

be more problematic for investment decisions than whether states may differ in imposing consumer access obligations, given that many in the industry are arguing that they do not discriminate anyway. This is not to minimize the danger of unanticipated consequences from regulation; but that risk needs to be evaluated and balanced against the risk of not allowing any safeguards be imposed anywhere.

^{127.} Section 230, which has been invoked as a basis for FCC jurisdiction to impose some form of consumer access provisions, when read in isolation cuts both ways. Section 230(b) provides that "[i]t is the policy of the United States . . . to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation." Depending on whether one gives primacy to the clause that says the Internet should be "unfettered by Federal or State regulation" or the clause that calls for preserving a "vibrant" Internet, one would find a basis for arguing for or against regulation at any level of government. The fact that this provision is taken from a section in the statute that deals with "Protection for Private Blocking and Screening of Offensive Material" should limit its relevance to either camp. 47 U.S.C. § 230(b).

^{128.} California I, 905 F.2d at 1217; California III, 39 F.3d at 931-933. See also, CCIA, 693 F.2d 198 (C.A.D.C. 1982) (upholding FCC's preemption of state regulation of customer premises equipment in Computer II); N.C. Utils. Comm'n v. FCC, 537 F.2d 787 (4th Cir. 1976); N.C. Utils. Comm'n v. FCC, 552 F.2d 1036 (4th Cir. 1977) (upholding FCC preemption of state regulations barring use of customer provided telephone equipment for intrastate service because it conflicted with FCC rules allowing customer provided equipment for interstate service).

^{129. 476} U.S. 355 (1986).

of state authority in section 152(b), particularly in areas where intrastate and interstate services are both affected, cut back on the FCC's authority to preempt state regulators in matters over which Congress had given states authority. The Court, however, further recognized an "impossibility exception" that applies where it is not possible to separate the federal and the state spheres. In such a situation, the FCC's authority is supreme.¹³⁰ In *California I*, the Ninth Circuit declared that the "impossibility exception" should be narrow and that the only limitation on a state's authority over intrastate telephone service is "when the state's exercise of that authority negates the exercise by the FCC of its own lawful authority over interstate communications."131 The Court found that the FCC had failed to meet its burden of showing that all state regulation of enhanced services would make the FCC's policy goal of deregulating enhanced services impossible because at least some services could be offered on a purely intrastate basis. It remanded several preemption provisions of Computer III to the FCC as insufficiently justified.

The FCC subsequently narrowed the scope of its preemption, acknowledging that "[p]reemption of state regulation in this area should be as narrow as possible to accommodate differing state views while preserving federal goals."¹³² In its Remand Order, ¹³³ the FCC modified its ruling so that it preempted only state structural separation requirements that affected services that include both interstate and In California III, the Ninth Circuit intrastate communications. considered state agency appeals to the FCC's Remand Order. It rejected a state argument that the FCC may preempt state action only when the FCC is acting under its Title II authority, and that the FCC may not preempt when it is acting to implement the more general goals of Title I. The court held that the FCC has preemptive authority when it acts under Title I as well as Title II. "The difficulty with Computer III was the FCC's failure to justify the breadth of the preemption in that order, not its jurisdiction to order any preemption."134

FCC preemption of state regulation will more likely be upheld if the FCC's actions include three components. First, if the agency classifies broadband transmission as an "interstate information service," and if that classification survives court challenge, that would increase the

^{130.} Id. at 375-376, note 4.

^{131.} California I, 905 F.2d 1217, 1244 (9th Cir. 1990).

^{132.} *California III*, 39 F.3d 919, 932 (9th Cir. 1994) (quoting Computer III Remand Proceedings: Bell Operating Company Safeguards and Tier 1 Local Exchange Company Safeguards, *Report and Order*, 6 F.C.C.R. 7571, 7631 (1991)).

^{133.} *Computer III* Remand Proceedings: Bell Operating Company Safeguards and Tier I Local Exchange Company Safeguards, *Report and Order*, 6 F.C.C.R. 7571 (1991).

^{134.} *California III*, 39 F.3d at 932.

[Vol. 2

FCC's ability to preempt state regulations. Second, the FCC must be able to demonstrate that even if the transmission is deemed to have both interstate and intrastate components, under Louisiana PSC and California I and III, it is not possible to separate them. Under the FCC's view that any connection to the Internet constitutes an interstate service, only a narrow set of services would qualify as purely intrastate and few if any would implicate the policy goals of innovation and speech that animate the consumer access proponents. Third, because the courts would have to find that the FCC's preemption was narrowly tailored to preserve federal goals, the FCC, in declining to adopt on a national level the consumer connectivity principles, must conclude (and provide some evidence to support) that the national policy goal of promoting deployment of broadband networks would be impeded by imposing consumer connectivity principles on either a state or a national level. Presumably it would do this by arguing that fragmentation across different states would deter infrastructure investment. This ties agency action closer to what Congress directed both states and federal agencies to consider-deployment of broadband transmission facilities. But, depending on the tendency of the reviewing court, the agency would need to provide something beyond mere conclusory assertions.

The ability of state or local governments to impose consumer access obligations on *cable* broadband services is also vulnerable to FCC preemption, and there may be no reason to believe state and local governments would be any more successful in imposing consumer access obligations than they were in imposing competitor ISP access obligations. The preemption analysis would be similar in most respect to that for wireline broadband, with the following differences. If the Ninth Circuit persists in its classification of the underlying transmission as a "telecommunications service," the local franchise authorities would lack jurisdiction under 47 U.S.C. 541(b)(3)(A)(i) which provides that cable operators "shall not be required to obtain a franchise . . . for the provision of telecommunications services." The state public utility commissions may be able to assert jurisdiction to the extent the services are intrastate, along the lines discussed above. If the courts uphold the FCC's classification of cable modem Internet access as an information service without an underlying telecommunications service, there is no express statutory language prohibiting either the states or the local franchising authorities from imposing a consumer access condition on cable broadband service. But the policy underlying 47 U.S.C. 541(b)(3)(B), which prohibits a franchising authority from imposing conditions on the provision of a telecommunications service by a cable operator may inform a court's analysis of a similar condition imposed by a local franchise authority on an information service.

In order to impose consumer access safeguards in either the wireline or cable broadband context, state agencies must have an independent basis of jurisdiction under state law. In other words, in addition to surviving a claim that the FCC's refusal to adopt such safeguards at the national level preempts state action—or in the highly unlikely event the FCC decides to delegate authority to the states to consider the issue on their own—the state agency must have authority to act under its own state laws.

Most state agencies that regulate broadband services have done so under the rubric of overseeing interconnection agreements, handling service quality complaints, or requiring state universal service contributions. Most states have an "unfair and deceptive practices" statute that mirrors the Federal Trade Commission Act. Attorneys general and private class action plaintiffs have invoked these consumer protection statutes to move against wireless carriers, an area where the Telecommunications Act of 1996 expressly preempts state action. How far they are able to take this in the wireless context will become clearer when the joint state attorneys general investigation concludes. The FCC's Local and State Government Advisory Committee has advised the Commission that it should reverse its plan to reclassify broadband services, noting that "state and local government have authority to impose customer service requirements to address anticompetitive actions by cable modem service providers."135 A number of states assert jurisdiction over broadband services through their jurisdiction over interconnection agreements, though a recent decision by the Ninth Circuit circumscribed the scope of policymaking authority that state agencies can claim through its authority under § 252 of the Telecommunications Act of 1996.¹³⁶

One approach would be for the federal agency to adopt the same procedural approach to preemption that it adopted in the Triennial Review and allow parties to challenge state actions on a case-by-case basis to determine if they are inconsistent with federal policy. This could serve to curb the more intrusive or extreme state actions that are more likely to impair nationwide development of broadband services and yet allow for more restrained state experimentation in a way that could permit some experience to accumulate.

^{135.} LSGAC ex parte, filed in Wireline and Cable Broadband Classification Proceedings, Feb. 10, 2003.

^{136.} Pac. Bell v. Pac-West Telecomm, 325 F.3d 1114 (9th Cir. 2003). The court overturned California PUC orders requiring reciprocal compensation provisions in interconnections agreements be applied to calls made to ISPs. The court ruled that the state agency lacked jurisdiction under § 252 of the Telecom Act to issue such "generic orders."

III. CONCLUSION

This is about the future. Despite the travesty of the dot-com moment, people in the United States and in many places around the world are taking broadband at steady rates. And innovation in this area is important for U.S. economic growth. Regulators at both the state and federal level must reckon with how to make legal sense of broadband services and facilities and develop a regulatory framework that makes sense.

Some states will continue to push for a policy role. Some will act in sympathy with the belief that whatever innovation is down the road, we need to protect the next AOL or the next Microsoft, and at a minimum these need access to broadband networks; some because their own economies are tied so closely to high tech development; and some, with significant rural populations, because they recognize the need to link their geographic outposts to commercial and educational centers.¹³⁷

As the battles shift to the state agencies, some legislatures are curbing their agencies' wings. Anticipating the possibility of an adverse ruling on broadband issues in the Triennial Review, SBC and other incumbents backed legislation in a number of states, including Indiana, Kansas, Missouri, and Texas to deregulate broadband services and to strip state commissions from jurisdiction over any broadband services or providers. One aspect of the relationship between the federal, state, and local governments in broadband will be decided by the Supreme Court as it reviews state statutes barring municipalities from providing telecommunication services.¹³⁸

^{137.} In addition to the ones mentioned earlier, a number of states are considering legislation to promote broadband deployment, including Colorado (SB-105, allowing local governments to help private telecom carriers finance broadband infrastructure through municipal bonds or guaranteed loans); Virginia (SB-1347, authorizing state broadband development authority to buy property, issue bonds and take other steps to extend reach of broadband services in southwestern part of state); Arkansas (SCR-3 would authorize state officials to work with telecom providers and school administrators to improve distance learning to reduce consolidation of school districts); Iowa (SF-386 permits retail rate increase but requires that resulting revenue increase be applied to broadband facilities investment in places where broadband is not available); Mississippi (SB-2979 provides state tax credits to telecom companies deploying broadband facilities); a number of states use an "anchor tenancy" arrangement and demand aggregation to promote deployment. The National Regulatory Research Institute conducted a survey in 2000-2001 to provide the Federal-State Joint Conference on Advanced Services, the NARUC Committee on Telecommunications, and state agencies with information on the regulatory status of broadband telecommunications services at the state level. The survey reports state programs to encourage deployment of broadband services and facilities as well as state agencies' regulatory treatment of advanced services.

^{138.} The Supreme Court will review an Eighth Circuit decision overturning an FCC order declining to preempt a Missouri state barring municipal provision of telecommunications services, Nixon v. Mo. Mun. League, 123 S.Ct 2605 (2003). The D.C. Circuit had previously

Even without legislative hobbling, it will be tough for state agencies to inject themselves into broadband policy because legally, the deck is stacked against their asserting much jurisdiction. And as an institutional matter, they may be too absorbed in the UNE impairment analysis delegated to them by the FCC, as well as their energy regulation responsibilities, to undertake a vigorous challenge to the FCC's preemption on broadband issues. But some will continue to be aggressive, and out of that may emerge, in addition to the inevitable false starts, some good policy initiatives that may lead us back to the future.

ruled in favor of the FCC's decision not to preempt in *City of Abilene v. FCC*, 164 F.3d 49 (1999). At issue is the interpretation of § 253, which prohibits a state from prohibiting "any entity" from providing a telecommunications service. The question is whether this applies to a state's political subdivisions. Although the Missouri statute did not prohibit cities from providing Internet services, most municipalities that have begun to provide their own services have done so largely to provide broadband services and most state statutes that forbid cities from providing services do not exclude Internet services from the prohibition. If, however, the FCC reclassifies wireline broadband services as an information service, states could certainly prohibit cities from providing such services, as is currently true for cable modems.

SUBSIDIZED RURAL TELEPHONY AND THE PUBLIC INTEREST:

A CASE STUDY IN COOPERATIVE FEDERALISM AND ITS PITFALLS

JIM CHEN*

TABLE OF CONTENTS

I. DEVOLUTION OVER DEREGULATION, RETRENCHMENT OVER	
Reform	308
II. THE RURAL AND HIGH-COST COMPONENT	
A. Core Statutory Provisions and Other Sources of Law	318
B. "Local Usage" and Service Area Definition	323
C. Service Quality Plans, "Wireline Equivalence," and	
Carrier of Last Resort Obligations	325
D. Advertising	328
III. DETERMINING THE PUBLIC INTEREST	
A. Competitive Neutrality and Consumer Choice	333
1. Neutrality as Between Service Providers	333
2. Technological Neutrality	338
B. Rural-Urban Parity	342
C. The Financial Impact of ETC Designations	347
1. An Impermissible Factor	
2. The True Relevance of the Financial Factor	352
3. Proposed Solutions	357
IV. PREEMPTING STATE REGULATION OF WIRELESS	
Telephony	362
V. CONCLUSION	369

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I. DEVOLUTION OVER DEREGULATION, RETRENCHMENT OVER REFORM

Federalism, unbound, dominates American constitutional law. Particularly in matters affecting Congress's power to regulate interstate commerce,¹ to enforce rights guaranteed by the fourteenth amendment,² and to subject the states to federal suit,³ the Supreme Court under Chief Justice William Rehnquist has built a formidable jurisprudence favoring the devolution of power from the federal government to the states.⁴ For good or for ill,⁵ decentralization dominates today's constitutional *Zeitgeist*.

At the same time, Congress and the federal regulatory agencies have led a "great transformation" of the law of economic regulation.⁶ The last two decades have witnessed natural gas wellhead decontrol,⁷ two federal schemes for regulating cable television,⁸ the displacement of the Interstate Commerce Commission by the Surface Transportation Board,⁹ the Energy Policy Act,¹⁰ and substantial progress toward comprehensive deregulation

^{1.} See, United States v. Morrison, 529 U.S. 598 (2000); United States v. Lopez, 514 U.S. 549 (1995); cf. Solid Waste Agency of N. Cook County v. United States Army Corps of Eng'rs, 531 U.S. 159 (2001).

^{2.} See Morrison, 529 U.S. at 598; City of Boerne v. Flores, 521 U.S. 507 (1997).

^{3.} See, e.g., Fed. Mar. Comm'n v. S.C. State Ports Auth., 535 U.S. 743 (2002); Bd. of Trs. of the Univ. of Ala. v. Garrett, 531 U.S. 356 (2001); Kimel v. Fla. Bd. of Regents, 528 U.S. 62 (2000); Coll. Savs. Bank v. Fla. Prepaid Postsecondary Educ. Expense Bd., 527 U.S. 666 (1999); Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Savs. Bank, 527 U.S. 627 (1999); Seminole Tribe v. Florida, 517 U.S. 44 (1996); cf. Alden v. Maine, 527 U.S. 706 (1999). The earliest of these cases, "Lopez, Seminole Tribe, and Boerne put a triple whammy on congressional authority." Philip P. Frickey & Steven S. Smith, Judicial Review, the Congressional Process, and the Federalism Cases: An Interdisciplinary Critique, 111 YALE L.J. 1707, 1722 (2002).

^{4.} See generally, e.g., Thomas W. Merrill, The Making of the Second Rehnquist Court: A Preliminary Analysis, 47 ST. LOUIS U. L.J. 569 (2003).

^{5.} Compare, e.g., John O. McGinnis, *Reviving Tocqueville's America: The Rehnquist Court's Jurisprudence of Social Discovery*, 90 CAL. L. REV. 485 (2002) (defending the Rehnquist Court's agenda as one that advances local control and associational freedom) *with, e.g.,* Jed Rubenfeld, *The Anti-Antidiscrimination Agenda*, 111 YALE L.J. 1141 (2002) (accusing the Rehnquist Court of retrenchment on a civil rights tradition established since the 1950s).

^{6.} See generally Joseph D. Kearney & Thomas W. Merrill, *The Great Transformation of Regulated Industries Law*, 98 COLUM. L. REV. 1323 (1998).

^{7.} See Natural Gas Wellhead Decontrol Act of 1989, Pub. L. No. 101-60, 103 Stat. 157; FERC Order No. 636, 57 Fed. Reg. 13,267 (April 16, 1992), *aff'd*, United Distrib. Cos. v. FERC, 88 F.3d 1105 (D.C. Cir. 1996).

^{8.} Cable Television Consumer Protection and Competition Act of 1992, Pub. L. No. 102-385, 106 Stat. 1460 (codified in scattered sections of 47 U.S.C.); Cable Communications Policy Act of 1984, Pub. L. No. 98-549, 98 Stat. 2779 (codified in scattered sections of 47 U.S.C.).

^{9.} ICC Termination Act of 1995, Pub. L. No. 104-88, 109 Stat. 803.

^{10.} Pub. L. No. 102-486, 106 Stat. 2776 (1992) (codified in scattered sections of 16, 25, 26, 30, and 42 U.S.C.).

of the electricity industry.¹¹ The command-and-control techniques that once typified the law of regulated industries have yielded to "complete detariffing, elimination of all entry restrictions, and [even] outright abolition" of regulatory supervision.¹² In the few remaining "market segments that have natural monopoly characteristics," a "new set of regulatory obligations including the duty to interconnect, to lease unbundled network elements, and to sell services for resale" will prevent incumbents from using their control of "bottleneck facilities... to discriminate against competitors."¹³ The full extent to which the common law and schemes of private ordering will fill the legal vacuum left by this regulatory retreat remains to be seen.¹⁴

The sheer depth of the academic and popular literature on both of these legal developments testifies to "the preeminence of right-of-center arguments in today's legal culture."¹⁵ What has failed to attract notice, however, is the fundamental incompatibility of the devolutionary and deregulatory agendas. The downward redirection of regulatory power toward state and local authorities obstructs many, if not virtually all, of the economic objectives of the deregulatory campaign. Devolution does not destroy regulatory power; it merely diverts it from the federal government to the states. Regulatory power, as it moves downstream, may actually increase its potential for mischief. Regulation at the state-law level will almost assuredly be more protective of local interests.

Conversely, deregulation can and perhaps should proceed without devolution. The transition from command-and-control regulation to market-based alternatives can occur within an entirely federal legal framework, one that actively excludes state law from the legal void created by the retreat from a more comprehensive system of regulation. The law of economic regulation abounds with examples of simultaneous displacement of federal and state authority. Congress, after all, is fully able not only to repeal federal regulatory schemes, but also to declare that a particular market is "best left *un*regulated" by the states.¹⁶ With respect to "the Internet and other interactive computer services," for example, Congress has declared it "the policy of the United States ... to preserve the vibrant

^{11.} See New York v. FERC, 535 U.S. 1 (2002). See generally Jim Chen, Regulatory Education and Its Reform, 16 YALE J. ON REG. 145 (1999) (reviewing doctrinal developments in the law of regulated industries since the mid-1980s)

^{12.} Kearney & Merrill, *supra* note 6, at 1363.

^{13.} Id. at 1364.

^{14.} See Philip J. Weiser, Regulatory Challenges and Models of Regulation, 2 J. ON TELECOMM. & HIGH TECH. L. 1 (2003).

^{15.} Gil Grantmore, *The Phages of American Law*, 36 U.C. DAVIS L. REV. 455, 457 (2003).

^{16.} Ark. Power Elec. Coop. Corp. v. Ark. Pub. Serv. Comm'n, 461 U.S. 375, 384 (1983) (emphasis in original); *accord, e.g.*, Transcon. Gas Pipe Line Corp. v. State Oil & Gas Bd., 474 U.S. 409, 422 (1986).

and competitive free market..., unfettered by Federal *or* State regulation."¹⁷ "Cooperative federalism," far from promoting competitive telecommunications markets, is probably the largest obstacle to the attainment of deregulatory objectives underlying the Telecommunications Act of 1996.¹⁸ Many controversies arising from the implementation of that statute have demonstrated how devolution destroys deregulation. Architects of sound regulatory policy must often choose one principle or the other. This article advocates deregulation.

The usual defenses of federalism fall into three broad categories: diversity in substantive policy, administrative efficiency, and enhanced political participation. Federalism, so it is said, enables "a single courageous State" to "serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country."¹⁹ Diverse state policies, in theory and on balance, yield greater satisfaction among members of the public,²⁰ at least to the extent they are able to vote with their feet.²¹ Finally, the maintenance of distinct federal and state sovereigns supposedly preserves individual freedom: "In the tension between federal and state power lies the promise of liberty."22 The court that supervised the breakup of the Bell system touted what it perceived as the "obvious conceptual similarity between competition in commerce as the foundation of our economic system and competition in ideas as the basis of our political system."23 As a matter of positive law, these arguments might not even matter. The Supreme Court has pledged to maintain the Constitution's division of authority between local and central authority "even if one could prove that federalism secured no advantages to anyone."24

Federalism provides an extremely shaky foundation for the formulation of sound regulatory policy. Its traditional justifications carry little to no weight in any other industry whose economies of scale, economies of scope, or dependence on technological innovation defies the

^{17. 47} U.S.C. § 230(b)(2) (2000) (emphasis added).

^{18.} Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified in scattered sections of 15, 18 and 47 U.S.C.)

^{19.} New State Ice Co. v. Liebmann, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting); see also Susan Rose-Ackerman, *Risk Taking and Reelection: Does Federalism Promote Innovation?*, 9 J. LEGAL STUD. 593 (1980) (presenting a formal economic model that disputes Justice Brandeis's "laboratories of democracy" hypothesis).

^{20.} See, e.g., Deborah Jones Merritt, *The Guarantee Clause and State Autonomy: Federalism for a Third Century*, 88 COLUM. L. REV. 1, 3-10 (1988); Michael W. McConnell, *Federalism: Evaluating the Founders' Design*, 54 U. CHI. L. REV. 1484, 1494 (1987).

^{21.} See generally Charles M. Tiebout, A Pure Theory of Local Expenditures, 64 J. POL. ECON. 416 (1956).

^{22.} Gregory v. Ashcroft, 501 U.S. 452, 459 (1991); *accord* United States v. Lopez, 514 U.S. 549, 576 (1995) (Kennedy, J., concurring).

^{23.} United States v. Am. Tel. & Tel. Co., 552 F. Supp. 131, 150 n.78 (D.C. Cir. 1982), aff d mem. sub nom. Maryland v. United States, 460 U.S. 1001 (1983).

^{24.} New York v. United States, 505 U.S. 144, 157 (1992).

regulatory reach of any geographically delimited jurisdiction.²⁵ The contemporary telecommunications industry displays all three of these traits in abundance. A decentralized approach to telecommunications policy is not merely unappealing, but affirmatively debilitating. Diversity is far from a virtue in an industry marked by functional convergence, interoperability, and network efficiencies.²⁶ In the logical layer of the information-based economy, measures promoting interoperability reduce transition costs and encourage entry.²⁷ What is true of competitors in private markets is equally true of their regulatory counterparts: "niche strategies are inherently dangerous in markets with strong network externalities."28 As the geographic scale of communications markets increases, regulatory subsidiarity that is, delegation of regulatory authority to the smallest available unit of government²⁹ realizes steadily lower efficiency gains. At some point, excessive subsidiarity will inflict actual harm. Gains in political accountability via decentralization bear a stiff cost. The law's vulnerability to demands for naked wealth transfers reaches its apex when benefits are concentrated and costs are diffuse.³⁰ Otherwise well-intentioned efforts to

^{25.} *Cf.* Daniel A. Farber, *Environmental Federalism in a Global Economy*, 83 VA. L. REV. 1283, 1304-05 (1997) (demonstrating that "[t]he conditions calling for a multilateral environmental regime are quite similar to those calling for a multilateral trade regime," namely, when local governments lack access to "[o]ptimal fiscal instruments," when competition in the relevant markets is imperfect, when "[p]ublic choice problems distort local decisions," and when individual "[j]urisdictions are large enough to affect global prices"). I have advocated "across-theboard globalism" on legal concerns as seemingly divergent as environmental protection, free trade, and regulatory policy. Jim Chen, *Globalization and Its Losers*, 9 MINN. J. GLOBAL TRADE 157, 192 (2000).

^{26.} See generally Mark A. Lemley & David McGowan, Legal Implications of Network Economic Effects, 86 CAL. L. REV. 479 (1998).

^{27.} See Lotus v. Borland, 49 F.3d 807, 821 (1st Cir. 1995), aff'd without opin., 516 U.S. 233 (1996).

^{28.} CARL SHAPIRO & HAL R. VARIAN, INFORMATION RULES 247 (1998).

^{29.} Cf. Treaty Establishing the European Economic Community, art. 5, signed in Rome, March 25, 1957, entered into force, Jan. 1, 1958 ("In areas which do not fall within its exclusive competence, the Community shall take action, in accordance with the principle of subsidiarity, only if and insofar as the objectives of the proposed action cannot be sufficiently achieved by the Member States and can therefore, by reason of the scale or effects of the proposed action, be better achieved by the Community."); CATECHISM OF THE CATHOLIC CHURCH § 1883 ("The teaching of the Church has elaborated the principle of subsidiarity, according to which a community of a higher order should not interfere in the internal life of a community of a lower order, depriving the latter of its functions, but rather should support it in case of need and help to co-ordinate its activity with the activities of the rest of society...." (internal quotation marks and citations omitted)). As to subsidiarity within the law of the European Union, see generally Deborah Z. Cass, *The Word the Saves Maastricht? The Principle of Subsidiarity and the Division of Powers Within the European Community*, 29 COMMON MKT. L. REV. 1107 (1992); A.G. Toth, *The Principle of Subsidiarity in the Maastricht Treaty*, 29 COMMON MKT. L. REV. 1079 (1992).

^{30.} See DANIEL A. FARBER & PHILIP P. FRICKEY, LAW AND PUBLIC CHOICE: A CRITICAL INTRODUCTION 17, 23-24 (1991); MICHAEL T. HAYES, LOBBYISTS AND LEGISLATORS: A THEORY OF POLITICAL MARKETS 101-02 (1981); DENNIS C. MUELLER, PUBLIC CHOICE II, at 239-41 (1989); MANCUR OLSON, THE LOGIC OF COLLECTIVE

police competition routinely dissolve into schemes for delivering benefits to well-organized groups at the expense of consumers and other "anonymous and diffuse" majorities.³¹ The rent-seeking never stops: even legislation that promises "the end of government intervention" in fact generates "new opportunities to capture decision making rents."³²

In light of these contradictions, sustaining one's hope in cooperative federalism requires a leap of faith akin to the suspension of belief that typifies the Western tradition in American public law. The states west of the hundredth meridian have displayed a remarkable talent for demanding autonomy from the central government while simultaneously insisting that the westward flow of federal largesse continue unabated. If, on one hand, Congress or the federal courts threaten gun ownership or the prior appropriation doctrine in water law, many westerners instantaneously disavow membership in the Union. At the same time, and without a trace of irony or shame, these very individuals protest the imminent destruction of their states' "equal footing" should federal authorities offer the slightest hint of revoking or even reducing the West's historic flow of subsidies for reclamation, grazing, forestry, and mining.³³ It is no longer the South but the West that needs Neil Young's reminder: every state, from Alabama to Wyoming, has "got the rest of the Union to help [it] along."³⁴

Quite appropriately, Colorado leads the nation in articulating the intellectual case for cooperative federalism, a theory that concedes nothing to antitrust as a policy at war with itself.³⁵ In the keynote speech of this symposium, Raymond Gifford, former chairman of the Colorado Public

ACTION 144-45 (1965). See generally Daniel A. Farber, Positive Theory as Normative Critique, 68 S. CAL. L. REV. 1565 (1995).

^{31.} Bruce Ackerman, *Beyond Carolene Products*, 98 HARV. L. REV. 713, 724 (1985). *See generally* William F. Shugart II, *Public-Choice Theory and Antitrust Policy, in* CAUSES AND CONSEQUENCES OF ANTITRUST: THE PUBLIC CHOICE PERSPECTIVE 7 (Fred S. McChesney & William F. Shugart II eds., 1995) (applying public choice theory to antitrust law).

^{32.} James A. Montanye, *Rent Seeking Never Stops: An Essay on Telecommunications Policy*, 1 INDEP. REV. 249, 277 (1996)

^{33.} At its most pathological, Western secessionism has culminated in the "County Supremacy Movement," whose signature argument is that title to federal public lands actually resides in local governments. This posture utterly lacks legal merit. *See, e.g.*, United States v. Volger, 859 F.2d 638 (9th Cir. 1988); United States v. Nye County, 920 F. Supp. 1108 (D. Nev. 1996); United States v. Gardner, 903 F. Supp. 1394 (D. Nev. 1995). *See generally* Robert Barrett, Comment, *History on an Equal Footing: Ownership of the Western Federal Lands*, 68 U. COLO. L. REV. 761 (1997); Paul Conable, Comment, *Equal Footing, County Supremacy, and the Western Public Lands*, 26 ENVTL. L. 1263 (1996).

^{34.} NEIL YOUNG, *Alabama, on* HARVEST (Warner Bros. 1972); *cf.* U.S. CONST. art. IV, § 4 ("The United States shall guarantee to every State in this Union a Republican Form of Government, and shall protect each of them against Invasion; and ... against domestic Violence."). *See generally* Jim Chen, *Rock 'n' Roll Law School*, 12 CONST. COMMENTARY 315 (1995).

^{35.} See ROBERT BORK, THE ANTITRUST PARADOX: A POLICY AT WAR WITH ITSELF (1978).

Utilities Commission, places federalism and subsidiarity at the heart of his call for "assertive modesty" in telecommunications regulation.³⁶ Professor Philip Weiser, director of the Silicon Flatirons Telecommunications Program, has forcefully advocated a prominent interpretive role for state regulators within federal telecommunications law.³⁷ Finally, Judge Stephen F. Williams of the U.S. Court of Appeals for the D.C. Circuit, who began his career as a member of the University of Colorado law faculty, has established himself as perhaps the foremost judicial authority on the Telecommunications Act. Among his many opinions interpreting this statute, his opinion for the panel in WorldCom, Inc. v. FCC,³⁸ a 2002 case partially upholding Bell Atlantic's authorization to offer long-distance service to its residential customers in Massachusetts, articulates a strong case for federal deference to state regulatory agencies. Together with Professor Dale Hatfield, former chief technologist for the Federal Communications Commission (FCC), Commissioner Gifford, Professor Weiser, and Judge Williams represent a distinct "Colorado school" in contemporary regulatory thought.

This article will attempt to assess, on an admittedly tentative basis, the success of the Colorado school in resolving the intrinsic contradiction of cooperative federalism. At least this much truth emerges from the work of the Colorado school: regulatory controversies have lain at the crossroads of the decentralization and deregulation agendas of a politically conservative legal culture. An entire generation has come of age since the 1982 case of *FERC v. Mississippi*^{\$9} mortally wounded William Rehnquist's original effort to revitalize the tenth amendment.⁴⁰ In their rush to lavish attention on the constitutional issues raised by the Public Utility Regulatory Policies Act of 1978 (PURPA),⁴¹ most legal scholars neglect to mention that the Supreme Court, one year after *FERC v. Mississippi*, upheld the congressionally mandated cogeneration and small power production rules that transformed PURPA into an engine of technological innovation and economic deconcentration in electricity generation.⁴² At the dawn of what

^{36.} See Raymond Gifford, address at the University of Colorado Symposium on Models of Regulation for the New Economy (Feb. 2, 2003).

^{37.} See Philip J. Weiser, Chevron, Cooperative Federalism, and Telecommunications Reform, 52 VAND. L. REV. 1 (1999); Philip J. Weiser, Federal Common Law, Cooperative Federalism, and the Enforcement of the Telecom Act, 76 N.Y.U. L. REV. 1692 (2001).

^{38. 308} F.3d 1 (D.C. Cir. 2002).

^{39.} FERC v Mississippi, 456 U.S. 742 (1982).

^{40.} See Nat'l League of Cities v. Usery, 426 U.S. 833 (1976), overruled by Garcia v. San Antonio Metro. Transit Auth., 469 U.S. 528 (1985). See generally, e.g., Mark Tushnet, Why the Supreme Court Overruled National League of Cities, 47 VAND. L. REV. 1623 (1994).

^{41.} Public Utilities Regulatory Policies Act, Pub. L. No. 95-617, 92 Stat. 3117 (1978) (codified as amended in scattered sections of 15, 16, 30, 42, and 43 U.S.C.).

^{42.} See Am. Paper Inst., Inc. v. Am. Elec. Power Serv. Corp. 461 U.S. 402 (1983). See generally, e.g., Bernard S. Black & Richard J. Pierce, Jr., The Choice Between Markets and Central Planning in Regulating the U.S. Electricity Industry, 93 COLUM. L. REV. 1339, 1348

we now recognize as the great transformation of regulated industries law, a bold federal power grab preceded and enabled deregulation.

PURPA, however, provides at best remote evidence on the relative merits of state-law subsidiarity versus federal supremacy. PURPA's jurisdictional premise that the greater federal power to preempt all state-law regulation of electricity includes the lesser power to issue commands to state public utility commissions⁴³ is fairly characterized as an "our way or the highway" approach to cooperative federalism.⁴⁴ PURPA made no pretense of implementing a regulatory model that the Colorado school would assuredly find more amenable: explicit federal delegation of dispositive decisionmaking authority to the states. Just as important, the coherence of the Colorado school's approach to cooperative federalism ought to be tested against a contemporary regulatory scheme rather than one developed during the presidency of Jimmy Carter. "[R]egulatory measures," after all, "are temporary expedients, not eternal verities."

To test whether a more deferential model of cooperative federalism provides a firm basis for "wager[ing] [regulatory] salvation upon some prophecy based upon imperfect knowledge,"⁴⁶ I propose to examine a seemingly obscure provision of the Telecommunications Act of 1996. The Act delegates authority to state public utility commissions to determine a carrier's eligibility to receive support from the federal Universal Service Fund for providing service in rural and high-cost areas.⁴⁷ Subsidized rural telephony is admittedly less sexy than the heavily contested disputes over the Total Element Long-Run Incremental Cost (TELRIC) rule, which the FCC uses to determine the prices at which incumbent local exchange carriers (ILECs) must sell unbundled network elements to their competitors,⁴⁸ and over open access to cable-based facilities for high-speed

- 46. Abrams v. United States, 250 U.S. 616, 630 (1919) (Holmes, J., dissenting).
- 47. See 47 U.S.C. § 214(e)(1) (2000).
- 48. See id. § 252(d)(1); 47 C.F.R. §§ 51.503, .505 (2002); Verizon Communications, Inc.

^{(1993);} Jeffrey D. Watkiss & Douglas W. Smith, *The Energy Policy Act of 1992 — A Watershed for Competition in the Wholesale Power Market*, 10 YALE J. ON REG. 447, 453-54 (1993).

^{43.} See FERC v. Mississippi, 456 U.S. at 765 (reasoning that because "Congress could have pre-empted the field" of electricity regulation, "PURPA should not be invalid simply because, out of deference to state authority, Congress adopted a less intrusive scheme and allowed the States to continue regulating in the area on the condition that they *consider*... suggested federal standards."); *see also id.* at 765 n.29 ("Certainly, it is a curious type of federalism that encourages Congress to pre-empt a field entirely, when its preference is to let the States retain the primary regulatory role.").

^{44.} See New York v. United States, 505 U.S. 144, 167 (1992) (citing, *inter alia, FERC v. Mississippi*, 456 U.S. at 764-65, in support of a model of "cooperative federalism" under which Congress "offer[s] States the choice of regulating that activity according to federal standards or having state law pre-empted by federal regulation").

^{45.} FPC v. E. Ohio Gas Co., 338 U.S. 464, 489 (1950) (Jackson, J., dissenting).

v. FCC, 535 U.S. 467, 493-97 (2002); AT&T Corp. v. Iowa Utils. Bd., 525 U.S. 366, 374 & n.3 (1999); U.S. Telecom Ass'n v. FCC, 290 F.3d 415 (D.C. Cir. 2002); Jim Chen, *The Second*

Internet access.⁴⁹ Both TELRIC and broadband open access have sparked furious debates over the proper balance between state and federal regulatory authority. For the moment, however, I shall forgo an assessment of cooperative federalism in those high-profile controversies in order to conduct a detailed examination of the universal service program and its special provision regarding rural service. It is precisely those markets where "the average consumer" or the average voter "has no incentive to become informed about [a contested] program, let alone to lobby against it," that naked wealth transfers from the ignorant many to the well-placed few are likeliest to take place.⁵⁰

Universal service merits special attention because it is one of the few relics of conventional public utility regulation to have survived the "great transformation." The 1996 Act sought "to limit state rate and entry but not universal service regulation."⁵¹ Universal service also represents a singularly impressive example of cooperative federalism. "Congress contemplated that the state public utility commissions would continue to play a vital role in the preservation and advancement of universal service...."⁵² As with living fossils in nature, however, we should eschew the temptation to assume that universal service as the coelacanth of telecommunications law has survived utterly unchanged.⁵³ Contemporary universal service to schools, libraries, and health-care providers⁵⁴ bears little resemblance to

Coming of Smyth v. Ames, 77 TEX. L. REV. 1535, 1541-42 (1999). See generally Jim Chen, The Legal Process and Political Economy of Telecommunications Reform, 97 COLUM. L. REV. 835 (1997) (discussing the legal precursors of the Telecommunications Act, especially regulation under the 1934 Act and the Modified Final Judgment); Joseph D. Kearney, From the Fall of the Bell System to the Telecommunications Act: Regulation of Telecommunications Under Judge Greene, 50 HASTINGS L.J. 1395 (1999).

^{49.} See, e.g., Nat'l Cable & Telecommunications Ass'n, Inc. v. Gulf Power Co., 534 U.S. 327 (2002); AT&T Corp. v. City of Portland, 216 F.3d 871 (9th Cir. 2000); In re Inquiry Concerning High-Speed Access to Internet over Cable and Other Facilities, 17 F.C.C.R. 4798, 4802, 4832 (2002) (ruling that the provision of high-speed Internet access over cable should be classified as an "information service"); Jim Chen, The Authority to Regulate Broadband Internet Access over Cable, 16 BERKELEY TECH. L.J. 677 (2001); Mark A. Lemley & Lawrence Lessig, Open Access to Cable Moderns, 22 WHITTIER L. REV. 3 (2000).

^{50.} Farber, *supra* note 30, at 1570.

^{51.} Cellular Telecomms. Indus. Ass'n v. FCC, 168 F.3d 1332, 1337 (D.C. Cir. 1999).

^{52.} AT&T Communications of the Pac. Northwest, Inc. v. US West Communications, Inc., 31 F. Supp. 2d 861, 864 (D. Or. 1998).

^{53.} *Cf.* DAVID M. RAUP, EXTINCTION: BAD GENES OR BAD LUCK? 41-42 (1991) (disputing the assumption that "living fossils" such as the coelacanth have somehow "survived unchanged for hundreds of millions of years" or "have ever evolved an immunity to extinction").

^{54.} See 47 U.S.C. § 254(b)(2), (6) (2000); Angela J. Campbell, Universal Service Provisions: The "Ugly Duckling" of the 1996 Act, 29 CONN. L. REV. 187, 203 (1996); Jim Chen, Standing in the Shadows of Giants: The Role of Intergenerational Equity in Telecommunications Reform, 71 U. COLO. L. REV. 921, 940 (2000); Jerry Hausman & Howard Shelanski, Economic Welfare and Telecommunications Regulation: The E-Rate Policy for Universal-Service Subsidies, 16 YALE J. ON REG. 19, 21 (1999) (describing the FCC's "e-rate"

traditional schemes focused on extending lifeline rates to low-income customers. Unlike PURPA, the Telecommunications Act invites the states to exercise independent (albeit not unconstrained) judgment in administering the federal universal service program. Within its own terms and as an example of cooperative federalism, universal service under the 1996 Act reflects evolution in telecommunications law.

Rural telephony is at once distinctly global and uniquely American.⁵⁵ It is global in the sense that no other segment of the American telecommunications market more closely resembles the physical and economic conditions faced by carriers seeking to extend service to markets not already saturated with multiple layers of communications infrastructure. "Emerging" markets abroad look very similar to rural markets at home. Rural telephony is also uniquely American insofar as the United States contains far more "vast obscurity beyond [its] cit[ies]" and far fewer citizens in "the dark fields of the republic roll[ing] on under the night" than most other developed countries.⁵⁶ America has much more elbow room relative to Europe and Japan.⁵⁷ Yet wireless telephony remains the exception rather than the rule in the United States. Other countries, regardless of their population density or level of economic development, have more warmly embraced wireless platforms. In the most negative sense, America alone remains a "wired nation."58 Even more surprisingly, rural Americans still lag behind their urban counterparts in adopting wireless telephone service. These anomalies enhance the value of examining the rural subsidy program as an exercise in cooperative federalism.

The balance of this article will examine the administration of the federal universal service program for rural and high-cost areas. Part II outlines this program and the cooperative scheme of joint federal and state

program as "the Commission's most visible regulatory action... pursuant to" the Telecommunications Act's "universal-service mandates").

^{55.} See Jon Nuechterlein, Incentives to Speak Honestly About Incentives: The Need for Structural Reform on the Local Competition Debate, 2 J. ON TELECOMM. & HIGH TECH. L. 399 (2003).

^{56.} F. SCOTT FITZGERALD, THE GREAT GATSBY 141 (Matthew J. Bruccoli ed., 1991) (1st ed. 1925).

^{57.} Based on population figures for 1997, the population density of the European Union was 115 inhabitants per square kilometer, almost four times the United States' population density of 29 inhabitants/km². At the same time, 134 million hectares were under cultivation in European Union, less than a third of the 425 million hectares cultivated in the United States. *See* EUROPEAN COMM'N, THE AGRICULTURAL SITUATION IN THE EUROPEAN UNION: 1998 REPORT, at T/23-T/24 (1999). The recent accession of new member-states to the European Union, especially Poland, Hungary, and the Czech Republic, changes the balance between urban and rural population within the European Union, but not enough to unseat the United States' position as the developed world's third most sparsely populated nation (after Australia and Canada).

^{58.} The slogan, "The Wired Nation," originated in Ralph Smith's report on cable television as an economically viable alternative to conventional broadcast television. *See* RALPH L. SMITH, THE WIRED NATION (1972); Ralph L. Smith, *The Wired Nation*, 210 NATION 582 (1970).

regulation on which it rests. Some disputes over the requirements imposed by the universal service program among others, the definition of "local usage," the propriety of a "wireline equivalence" rule for wireless carriers, and the requirement that a subsidized carrier advertise its services have challenged the ability of state regulators to administer the program without discriminatory regard to carriers' incumbency status *vel non* or their technological platforms.

Part III examines in depth the most important task performed by state regulators in the administration of the rural and high-cost support program: determination of the public interest to be served by competitive entry into these markets. After describing the centrality of competitive neutrality and consumer choice to this analysis, I shall argue that states must resist the temptation to inject an affirmatively unlawful factor namely, the impact of competitive entry on the solvency of the Universal Service Fund into their assessments of the public interest.

Part IV explores an issue raised by the regulatory mandate of technological neutrality. Most competitive telecommunications carriers in rural areas deploy wireless infrastructure in whole or in part. A provision of the Communications Act predating the 1996 overhaul preempts state-law regulation of rates or entry in the market for commercial mobile radio services. I shall explain how this provision affects state administration of the rural and high-cost support program.

Part V concludes that federal mechanisms for subsidizing rural telephony demonstrate the irreconcilable conflict between decentralization and deregulation. Raymond Gifford's proposal for "assertive modesty" contains an intrinsic limit on the reach of presumptive deference to state regulatory commissions.⁵⁹ Insofar as state regulators are not prepared to complete the transition from traditional public utility regulation to the legal models of the "great transformation," Chairman Gifford would accord state regulators no deference. This case study takes Chairman Gifford's proposition one step further: there should be no deference whatsoever to interpretations of law and other exercises of discretion undertaken by state regulators charged with implementing specific aspects of federal telecommunications law.

^{59.} See Gifford, supra note 36.

II. THE RURAL AND HIGH-COST COMPONENT OF THE FEDERAL UNIVERSAL SERVICE PROGRAM

A. Core Statutory Provisions and Other Sources of Law

The Telecommunications Act of 1996 promised to "promote competition and reduce regulation," "secure lower prices and higher quality encourage the services . . . and rapid deployment of new telecommunications technologies."60 Numerous provisions of the Act instruct the FCC, with varying degrees of specificity, "to promote ... policies and purposes ... favoring diversity of media voices, vigorous economic competition, technological advancement, and promotion of the public interest, convenience, and necessity."⁶¹ The legislative history of the Act confirms Congress's intent "to provide for a pro-competitive, deregulatory national policy framework designed to accelerate rapidly the private sector deployment of advanced telecommunications and information technologies and services to all Americans by opening telecommunications markets to competition."62

The Act's universal service provisions are no exception to this procompetitive legislative package. Together with the FCC's rules on interconnection and unbundled access (of which the TELRIC rule is the most celebrated component)⁶³ and on access charge reform,⁶⁴ the FCC's initial report and order on universal service⁶⁵ headlined a "competition trilogy" of rules on local telephone reform⁶⁶ that was immodestly but not inaccurately heralded as "the most pro-competitive action of government since the break-up of the Standard Oil Trust."⁶⁷ Because comprehensive regulatory reform and the opening of local telephone markets threatened to

^{60.} Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified in scattered sections of 15, 18 and 47 U.S.C.) (preamble).

^{61. 47} U.S.C. § 257(b) (2000).

^{62.} H.R. CONF. REP. NO. 104-488, at 113 (1996).

^{63.} See Implementation of the Local Competition Provisions in the Telecomms. Act of 1996, 11 F.C.C.R. 15,499 (1996), aff'd in part, rev'd in part sub nom. AT&T Corp. v. Iowa Utils. Bd., 525 U.S. 366 (1999).

^{64.} See Access Charge Reform, 7 Communications Reg. (P&F) 1209 (Fed. Communications Comm'n 1997), aff'd sub nom. Southwestern Bell Tel. Co. v. FCC, 153 F.3d 523 (8th Cir. 1998); Access Charge Reform Price Cap Performance Review for Local Exch. Carriers, 11 F.C.C.R. 21,354 (1996).

^{65.} Fed.-State Joint Bd. on Universal Serv., 12 F.C.C.R. 8776 (1997) [hereinafter *First Report & Order*], *aff'd in part, rev'd in part sub nom.* Tex. Office of Pub. Util. Counsel v. FCC, 183 F.3d 393 (5th Cir. 1999) *cert. denied*, 530 U.S. 1210, 1223 (2000) *and cert. dismissed*, 531 U.S. 975 (2000).

^{66.} See generally Gregory L. Rosston, The 1996 Telecommunications Act Trilogy, 5 MEDIA L. & POL'Y 1, (Winter 1996).

^{67.} *Implementation of the Local Competition Provisions*, 11. F.C.C.R. at 16,239 (separate statement of Chairman Hundt).

undermine the traditional system of implicit subsidies, the 1996 Act integrated a new universal service mechanism into its market-opening provisions.⁶⁸

In considering and ultimately passing the Telecommunications Act, Congress expressed its understanding that traditional mechanisms "for universal service are uniquely suited for a regulated market where limits on competition guarantee economic returns that are sufficient... to allow firms to subsidize their own high-cost consumers."⁶⁹ The legislative history of the Act evinces congressional sensitivity to the erosion of "nearguaranteed returns" under deregulation and to the need for coordinating universal service support with "an orderly transition from a regulated market to a competitive and deregulated market."⁷⁰ Congress could not have been clearer in linking the preservation of universal service with its desire to promote "competition for local telephone service by cable, wireless, long distance, and satellite companies, and electric utilities, as well as other entities."⁷¹

The 1996 Act established a Federal-State Joint Board on universal service.⁷² Universal service support must "be explicit and sufficient to achieve the purposes of" the 1996 Act.⁷³ The requirement of "explicit" subsidies has rendered all implicit subsidies illegal.⁷⁴ Congress adopted the principle "that any support mechanisms continued or created under" the new statute "should be explicit, rather than implicit as many support mechanisms" had been.⁷⁵ The 1996 reform represented "a great improvement because it move[d] the scheme for Universal Service out from between the lines of the incumbents' rate structures and place[d] it in the light of day."⁷⁶ In order to receive federal universal service support, a carrier

^{68.} See Tex. Office of Pub. Util. Counsel, 183 F.3d at 406; Tekstar Communications, Inc., Docket No. P-5542/M-01-1865, slip op. at 2 (Minn. Pub. Utils. Comm'n, May 28, 2002).

^{69.} H.R. REP. NO. 104-204, at 68 (1995), reprinted in 1996 U.S.C.C.A.N. 10, 33.

^{70.} Id.

^{71.} S. REP. NO. 104-23, at 5 (1995).

^{72.} See 47 U.S.C. § 254(a) (2000).

^{73.} Id. § 254(e).

^{74.} See Comsat Corp. v. FCC, 250 F.3d 931, 938 (5th Cir. 2001). See also Alenco Communications, Inc. v. FCC, 201 F.3d 608, 623 (5th Cir. 2000); TOPUC, 183 F.3d at 425, Southwestern Bell Tel. Co. v. FCC, 153 F.3d 523, 537-38 (8th Cir. 1998).

^{75.} H.R. CONF. REP. NO. 104-458, at 131 (1996), *reprinted in* 1996 U.S.C.C.A.N. 124, 142.

^{76.} John W. Berresford, *The Future of the FCC: Promote Competition, Then Relax*, 50 ADMIN. L. REV. 731, 761 (1998); *cf.* Qwest Corp. v. FCC, 258 F.3d 1191, 1196 (10th Cir. 2001) (acknowledging how universal service before 1996 was accomplished through "a combination of explicit monetary payments to local phone companies and implicit subsidies through rate designs," especially the imposition of "uniform rates throughout a company's service area, which enabled the company to charge above-cost rates in urban areas to support below-cost rates in rural areas"); Multi-Ass'n Group (MAG) Plan for Regulation of Interstate Servs. of Non-Price Cap Incumbent Local Exch. Carriers & Interexchange Carriers, 16 F.C.C.R. 11,244, 11,363 (2001) (separate statement of Ness, Comm'r) (noting the "critical role" that "State

must be designated as an eligible telecommunications carrier (ETC).⁷⁷ An ETC must "offer the services that are supported by Federal universal service support mechanisms."⁷⁸ It must do so "using its own facilities or a combination of its own facilities and resale of another carrier's services."⁷⁹ Moreover, the would-be ETC must "advertise the availability of such services and the charges therefor using media of general distribution."⁸⁰

The 1996 Act delegates to the states the task of "designat[ing] a common carrier that meets the[se] requirements... as an eligible telecommunications carrier."⁸¹ The designation of ETCs in rural markets requires an additional step. In markets subject to the jurisdiction of a state regulatory commission, each "State commission *may*, in the case of an area served by a rural telephone company, and *shall*, in the case of all other areas, designate more than one common carrier as an eligible telecommunications carrier... so long as each additional requesting carrier meets the requirements" set out in 47 U.S.C. § 214(e)(1).⁸² "Before designating an additional eligible telecommunications carrier for an area served by a rural telephone company, the State commission shall find that the designation is in the public interest."⁸³ "In the case of a common carrier ... not subject to the jurisdiction of a State commission," the Federal Communications Commission performs an identical public interest inquiry in lieu of its state-law counterpart.⁸⁴

In concert, these statutory provisions set forth four distinct requirements for a carrier seeking ETC designation:

- 1. The carrier must "offer the services that are supported by Federal universal support mechanisms."⁸⁵
- 2. The carrier must use either "its own facilities or a combination of its own facilities and resale of another carrier's services."⁸⁶
- 3. The carrier must "advertise the availability of such services and the charges therefor using media of general distribution."⁸⁷

commissions ... play in ensuring that subsidies implicit in intrastate rates are made explicit") [hereinafter *MAG Plan Order*].

^{77.} See 47 U.S.C. §§ 214(e)(1), 254(e) (2000).

^{78.} Id. § 214(e)(1)(A).

^{79.} Id.

^{80.} Id. § 214(e)(1)(B).

^{81.} Id. § 214(e)(2).

^{82.} Id. (emphases added).

^{83.} Id.

^{84.} *Id.* § 214(e)(6); *see also* Procedure for Designation of Eligible Telecommunications Carriers Pursuant to Section 214(e)(6) of the Communications Act, 63 Fed. Reg. 162 (Jan. 5, 1998).

^{85. 47} U.S.C. §214(e)(1)(A) (2000).

^{86.} *Id.*

^{87.} Id. §214(e)(1)(b)

4. Designation of the carrier as an ETC must be "consistent with the public interest, convenience, and necessity." Where the service area at issue belongs to "a rural telephone company," the relevant state commission must explicitly "find that the designation is in the public interest."⁸⁸

Determining whether a carrier satisfies the first of these conditions requires an examination of the FCC's regulations. In section 54.101(a) of its rules, the FCC has set forth nine supported services that an ETC must offer: (1) voice grade access to the public switched network, (2) local usage, (3) dual tone multi-frequency signaling or its functional equivalent, (4) single-party service or its functional equivalent, (5) access to emergency services, (6) access to operator services, (7) access to interexchange service, (8) access to directory service, and (9) toll limitation for qualifying low-income consumers.⁸⁹

Among the four broad prerequisites for ETC designation, only the second typically escapes serious controversy. The statute quite plainly withdraws the welcome mat from pure resellers of local carriage, and such firms never seek ETC status. In rural markets, the ILEC will capture the first ETC designation for its service area. As a result, a competitive carrier cannot become the second or subsequent ETC in a rural area until a state commission (or, if a state has forsworn jurisdiction, the FCC) finds that each additional ETC designation serves the public interest. Satisfying the section 54.101(a) checklist and the 1996 Act's advertising requirement can also become legal bottlenecks in a competitive carrier's pursuit of ETC status. So sharp is the distinction that competitive carriers that succeed in securing ETC designation deserve a title of their own: competitive eligible telecommunications carrier, or CETC.

These complex legal provisions have given rise to numerous controversies over the administration of the federal Universal Service Fund. The ability of incumbents to transform the ETC designation process into a weapon against competition demands that courts and regulators take special care to uphold the procompetitive, deregulatory, and innovation-inducing purposes of the 1996 Act. Lest misinterpretation of the law facilitate rampant discrimination against competitive wireless carriers, policymakers must master difficult statutory terms such as the "public interest" and other pivotal legal concepts. Full understanding of the ETC designation process and its contribution to the preservation and advancement of universal service demands mastery of no fewer than six distinct sources of binding legal standards.

^{88.} *Id.* §214(e)(2)

^{89. 47} C.F.R. § 54.101(a) (2002); see also 47 U.S.C. §§ 214(e)(1), 254(c) (2000).

First, 47 U.S.C. § 214(e) establishes basic eligibility criteria for all carriers seeking federal universal service support. Section 214(e) prescribes the same substantive criteria for all ETC petitions regardless of whether they are approved by the Federal Communications Commission or by state commissions.

Statutory origins are especially critical in the application of the second and perhaps this setting's most important legal standard: the "public interest" in designating more than one ETC in a rural market. Far from being an open-ended mandate for unbounded administrative decisionmaking, the public interest standard draws its meaning from the statutory provisions that govern the federal universal service program.

Third, the FCC's interpretations of the 1996 Act and other statutory provisions governing the universal service program constitute a source of binding legal standards in their own right. In particular, the FCC's reasonable interpretations of the term "public interest" (which, it bears repeating, is statutory in origin) merit judicial deference.⁹⁰

Three additional sources of law apply with special force to ETC designations by state commissions. In reviewing the FCC's *First Report and Order* on universal service, the United States Court of Appeals for the Fifth Circuit held that the Commission could not categorically "prohibit[] the states from imposing additional eligibility requirements on carriers otherwise eligible to receive federal universal service support."⁹¹ The Fifth Circuit nevertheless recognized at least one limitation on the regulatory discretion of state commissions. "[E]ligibility requirements" that are so "onerous . . . that no otherwise eligible carrier could receive designation . . . would probably run afoul of § 214(e)(2)'s mandate to 'designate" carriers eligible for federal universal service support.⁹² Insofar as section 214(e)(6) imposes an identical "mandate to 'designate' carriers" in proceedings falling within exclusive federal jurisdiction, the same limitation constrains the discretion of the FCC.

Preemption under the 1996 Act supplies two final sources of law. Section 253(a) of the Act preempts state-law provisions that "prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service."⁹³ Finally, the preemptive power of 47 U.S.C. § 332 deprives the states and their local subdivisions of "authority to regulate the entry of or the rates charged by any commercial mobile service."⁹⁴ Section 332 thus preempts state-law that

^{90.} See Chevron U.S.A., Inc. v. Natural Res. Def. Council, 467 U.S. 837, 842-43 (1984); RT Communications, Inc. v. FCC, 201 F.3d 1264, 1267 (10th Cir. 2000).

^{91.} Tex. Office of Pub. Util. Counsel v. FCC, 183 F.3d 393, 418 (5th Cir. 1999).

^{92.} Id. at 418 n.31.

^{93. 47} U.S.C. § 253(a) (2000).

^{94.} Id. § 332(c)(3)(A).

might otherwise burden prospective ETCs that would deliver federally supported services over wireless facilities regulated under federal law as commercial mobile radio service.

The remainder of Part II will explore disputes over the section 54.101(a) checklist and the advertising requirement. State commissions' determination of the public interest before designating a CETC is a highly contentious issue that warrants in-depth consideration in its own right. I shall defer that issue until Part III.

B. "Local Usage" and Service Area Definition

Local usage has not only a geographic dimension, but also a temporal one. The applicable FCC regulation defines "local usage" as "an amount of minutes of use of exchange service, . . . provided free of charge to end users."⁹⁵ What the regulation implies and what it states explicitly are both important. First, the FCC's definition of local usage does not define "local" in geographic terms, much less by reference to an incumbent local exchange carrier's service area. Second, the regulation quite plainly contemplates that local usage may be provided as a finite number of minutes per billing period. A requirement of unlimited local usage would be incompatible with the FCC's definition of local usage.

An understanding of the local usage requirement begins with service area definition. Fundamental physical differences between wireline and wireless platforms frequently, perhaps invariably, require regulators to refine existing definitions of the area in which a subsidized carrier will offer local usage. Under the 1996 Act, the "term 'service area' means a geographic area established by a State commission ... for the purpose of determining universal service obligations and support mechanisms."96 "In the case of an area served by a rural telephone company, 'service area' [presumptively] means such company's 'study area' "97 A CETC's proposed service area should be approved unless its proposed redefinition constitutes an attempt to cream-skim, inflicts significant additional administrative burdens, or obstructs the regulation of rural LECs during the transition from universal service support based on embedded costs to a strictly forward-looking basis for high-cost support.⁹⁸ Indeed, the FCC actively "encourage[s] states to consider disaggregating a non-contiguous service area of a rural telephone company into service areas composed of the contiguous portions of that area because some wireless carriers may be unable to provide service in non-

^{95. 47} C.F.R. § 54.101(a)(2) (2002).

^{96. 47} U.S.C. § 214(e)(5) (2000).

^{97.} Id.

^{98.} See Fed.-State Joint Bd. On Universal Serv., 12 F.C.C.R. 87, 178-79 (1996).

contiguous service areas."⁹⁹ Refusal by a state commission to cooperate with service area redefinition has the potential to raise a formidable barrier to competition. Requiring carriers "to serve a non-contiguous service area as a prerequisite to eligibility" ranks high among approaches to service area definition that would have a "particularly harmful" effect on "competition in rural areas" by "imposing additional burdens on wireless entrants."¹⁰⁰

Although the FCC does require some minimum amount of local usage,¹⁰¹ the Commission has never specified the precise number of minutes that a carrier must offer.¹⁰² The Commission has, however, granted ETC status to wireless carriers that offer "varying amounts of local usage in [their] monthly service plans"¹⁰³ or provide at least one "rate plan that includes unlimited local usage" among a range of "several service options [that] includ[e] varying amounts of local usage..."¹⁰⁴

The Telecommunications Act forbids a state commission from requiring unlimited local usage as a condition of designating an eligible telecommunications carrier. In its July 2002 recommendation to the FCC, the Federal-State Joint Board on Universal Service specifically rejected a proposal to add unlimited local usage to the list of services supported by the USF.¹⁰⁵ The Joint Board specifically wished to leave states and carriers the option of using metered pricing of local usage to encourage low-income and low-volume consumers to subscribe to telecommunications service.¹⁰⁶ The Board also recognized that a requirement of unlimited local usage would violate the federal principle of competitive neutrality among telecommunications carriers "by undercutting competition and reducing consumer choice."107 The Board and the FCC have long recognized that requiring "a very high level of local usage" let alone unlimited calling "would give a competitive advantage to wireline carriers."¹⁰⁸ A "measured use" plan, on the other hand, would satisfy the local usage requirement. Unlike an unlimited calling plan, a "metered" or "measured use" plan provides the customer a limited number of minutes of calling per billing

324

^{99.} First Report & Order, supra note 65, at 8792.

^{100.} Id. at 8882-83.

^{101.} See id. at 8813.

^{102.} *Cf. id.* at 8812 (reserving to the FCC the responsibility for determining the minimum number of minutes required for "local usage" for purposes of federal universal service support, while permitting states to determine the minimum number of minutes required for purposes of universal service mechanisms funded and operated by the states).

^{103.} W. Wireless Corp., 16 F.C.C.R. 48, 52 (2000).

^{104.} Pine Belt Cellular, Inc. & Pine Belt PCS, Inc., 17 F.C.C.R. 9589, 9593 (2002).

^{105.} See Fed.-State Joint Bd. on Universal Serv., 17 F.C.C.R. 14,095, 14,113-14 (2002).

^{106.} See id. at 14,113.

^{107.} Id. at 14,113-14.

^{108.} Fed.-State Joint Bd. on Universal Serv., 13 F.C.C.R. 21,252, 21,279 (1998); see also First Report & Order, supra note 65, at 8814.

period, typically with an option to purchase additional minutes at a predetermined rate.

The experience of the Minnesota Public Utilities Commission (MPUC) is illustrative. The MPUC has never defined local usage in terms of unlimited calling. Rather, that commission has acknowledged that a competitive carrier may satisfy the requirement of "local usage" by offering an unlimited number of minutes in a local calling area roughly equivalent to the ILEC's local calling area.¹⁰⁹ The MPUC has also ruled that a carrier that offers at least one service offering that includes an unlimited number of minutes clearly satisfies the federal requirements of "local usage."¹¹⁰ ETCs in Minnesota are receiving federal universal service support for measured-use lines.¹¹¹ For example, the MPUC has certified that CenturyTel of Minnesota is an ETC receiving federal USF support for services identified in the section 54.101(a) checklist, including local usage.¹¹² Minnesota law therefore comports with the FCC's view that an ETC may satisfy the obligation to provide local usage by including "a variety of local usage plans" within its overall "universal service offering."¹¹³

C. Service Quality Plans, "Wireline Equivalence," and Carrier of Last Resort Obligations

Federal law bars a state commission from imposing a service quality plan, especially one that mirrors an incumbent carrier's offerings. In its initial examination of the 1996 Act's universal service mandate, the Federal-State Joint Board specifically addressed and soundly rejected a proposal to require competitive ETCs to develop and submit service quality plans as a condition of certification: "We are unpersuaded... that the Commission should institute specific standards to ensure that competitors provide the same quality service as the incumbent."¹¹⁴ Instead, the Board "agree[d]... that competition should ultimately give carriers the incentive to provide quality services by allowing consumers to choose among various telecommunications providers."¹¹⁵ In its *First Report & Order* on universal service, the FCC adopted the Board's recommendation "against the

^{109.} See Minn. Cellular Corp., Docket No. P-5695/M-98-1285, slip op. at 8-10, 1999 WL 1455080, at *7-8 (Minn. Pub. Utils. Comm'n, Oct. 27, 1999).

^{110.} See WWC Holding Co., Docket No. P-5695/M-98-1285, slip op. at 3, 2000 WL 668286 at *2 (Minn. Pub. Utils. Comm'n, April 19, 2000).

^{111.} See, e.g., CenturyTel of Minn., Inc., Exchange Services Tariff § 5.2.1, at 18 (issued Nov. 22, 2002; effective Jan. 26, 2003), *available at* http://www.centurytel.com/Services/Tariffs/minnesota/minnloc.pdf, at 94.

^{112.} See Fed. Universal Serv. Support, Docket No. P-999/M-01-1219, 2001 WL 1658767, at *4 (Minn. Pub. Utils. Comm'n, Oct. 9, 2001).

^{113.} Cellular S. License, Inc., 17 F.C.C.R. 24,393, 24,400 (2002).

^{114.} Fed.-State Joint Bd. on Universal Serv., 12 F.C.C.R. 87, 141 (1996).

^{115.} *Id.* at 140-41.

establishment of federal technical standards as a condition to receiving universal service support."¹¹⁶

Considerations of this sort underlie the FCC's insistence that "a telecommunications carrier's inability to demonstrate that it can provide ubiquitous service at the time of its request for designation as an ETC should not preclude its designation as an ETC."117 At a minimum, therefore, requiring compliance with a service quality plan would violate the universal service principle of competitive neutrality. More pointedly, such a state-law condition on ETC designation violates section 253. This provision of the 1996 Act bans any "State or local regulation, or other State or local legal requirement, [that] prohibit[s] or ha[s] the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service."¹¹⁸ Section 253 specifically conditions "the ability of a State to impose ... requirements necessary to preserve and advance universal service" on the state's compliance with the principle that such requirements be set forth and applied "on a competitively neutral basis."119

Anticipating state commissions' ability to manipulate ETC petitions by competitive carriers for anticompetitive purposes, the FCC has acted upon Congress's command to "preempt the enforcement of [any] statute, regulation, or legal requirement" that violates the federal mandate to remove barriers to entry into local and interstate telecommunications markets.¹²⁰ For instance, when the South Dakota Public Utilities Commission demanded that a carrier provide supported services throughout a service area before being designated as an ETC, the FCC preempted that state-law condition.¹²¹ The FCC unequivocally declared that a state-law provision which effectively "require[s] the provision of service ... prior to ETC designation" unlawfully "prohibits or has the effect of prohibiting the ability of competitive carriers to provide telecommunications service."¹²²

For its part, the North Dakota Public Service Commission has reasoned that a "requirement to be providing the required universal services to 100% of a service area before receiving designation as an ETC could be so onerous as to prevent any other carrier from receiving the ETC

119. 47 U.S.C. § 253(b) (2000).

^{116.} First Report & Order, 12 F.C.C.R. 8776, 8831 (1997).

^{117.} W. Wireless Corp. Pet. for Preemption of an Order of the S.D. Pub. Utils. Comm'n, 15 F.C.C.R. 15,168, 15,175 (2000) (emphasis added) [hereinafter *S.D. Preemption Order*]; *accord Cellular South*, 17 F.C.C.R. at 24,399; RCC Holdings, Inc., 17 F.C.C.R. 23,532, 23,538 (2002).

^{118. 47} U.S.C. § 253(a) (2000). See generally S.D. Preemption Order, supra note 117, at 15,172-81 (analyzing federal preemption of anticompetitive regulations under state or local law).

^{120.} Id. § 253(d).

^{121.} See S.D. Preemption Order, supra note 117, at 15,173.

^{122.} Id. at 15,169 (citing 47 U.S.C. § 253(a)).

designation in any service area," going so far as to "require the Commission to rescind the ETC designation already given to North Dakota ILECs."¹²³ The North Dakota commission's conclusion sheds light on the meaning of the Fifth Circuit's decision, which upheld significant portions of the FCC's *First Report & Order* on universal service.¹²⁴ Although the Fifth Circuit did hold that the FCC "erred in prohibiting the states from imposing additional eligibility requirements on carriers otherwise eligible to receive federal universal service support,"¹²⁵ that court also acknowledged that "eligibility requirements" that are so "onerous . . . that no otherwise eligible carrier could receive designation . . . would probably run afoul of § 214(e)(2)'s mandate to 'designate'" carriers eligible for federal universal service support.¹²⁶ In light of the Fifth Circuit's decision, the North Dakota commission's ruling demonstrates that federal law precludes state commissions from conditioning the designation of a wireless carrier as an ETC upon satisfaction of wireline-oriented service quality standards.

For similar reasons, the Joint Board and the FCC have refused to require CETCs to fulfill carrier of last resort (COLR) obligations. The Joint Board rebuffed the suggestion "that the Commission should require competing telecommunications carriers to meet all the obligations imposed by the state on the incumbent LEC, such as COLR requirements or rate regulation . . . to prevent unfair treatment of incumbent LECs."¹²⁷ Instead, the Board "conclud[ed] that establishing specific federal rules or guidelines that would impose symmetrical regulatory obligations on all carriers receiving universal service support are unnecessary to protect the incumbent and would chill competitive entry into high-cost areas."128 The FCC squarely rejected the suggestion that it "subject all eligible carriers to the regulatory requirements that govern ILECs, including pricing, marketing, service provisioning, and service quality requirements, as well as carrier of last resort (COLR) obligations."129 Every tribunal that has considered the issue since the First Report & Order has come to the same conclusion.¹³⁰ COLR and tariffing obligations therefore meet the same fate as service quality plans illegality as a matter of federal law.

^{123.} W. Wireless Corp. Designated Eligible Carrier Application, Case No. PU-1564-98-428, at ¶ 36 (N.D. Pub. Serv. Comm'n, Dec. 15, 1999); accord S.D. Preemption Order, supra note 117, at 15,174 & n.31.

^{124.} See Tex. Office of Pub. Util. Counsel v. FCC, 183 F.3d 393 (5th Cir. 1999).

^{125.} Id. at 418.

^{126.} Id. at 418 n.31.

^{127.} Fed.-State Joint Bd. on Universal Serv., 12 F.C.C.R. 87, 169 (1996).

^{128.} Id.

^{129.} First Report & Order, supra note 65, at 8856 (emphasis added).

^{130.} See Application of Smith Bagley, Inc., Docket No. T-02556A-99-0207, Decision No. 63269, Order (Ariz. Corp. Comm'n, Dec. 15, 2000); Smith Bagley, Inc., Util. Case No. 3026 (N.M. Pub. Reg. Comm'n, Aug. 14, 2001); Petition of RCC Minn., Inc. for Designation as an ETC, Docket No. UT-023033 (Wash. Util. & Transp. Comm'n, Aug. 14, 2002).

Although the FCC may authorize a state commission to designate an ETC for unserved areas,¹³¹ it must do so in a manner that enables a state commission to determine which carrier would be able to provide the specifically requested service most efficiently and then provide the prospective carrier an opportunity to be heard. A proceeding of this nature, of course, can take place only after a request for service has been made.

These legal verities undermine incumbent carriers' frequent demand that state regulators impose conditions beyond the already extensive demands of the federal universal service program in order to create parity with respect to regulatory burdens and benefits as between incumbent and competitive carriers. "Congress appears to have contemplated" the arrangement that incumbent carriers decry: the federal universal service program does indeed permit the situation in which one carrier "wants to be designated as an ETC for an area already being served by a rural telephone company, which is presumably [being] regulated by the state."¹³²

Indeed, an appropriate view of regulatory symmetry under the federal universal service program demands that the FCC and state commissions alike eschew prerequisites to ETC designation. An "incumbent LEC is required to make service available to all consumers upon request," but the incumbent can acquire and retain its ETC status even though it "may not have facilities to every possible consumer."¹³³ True to its belief that "the ETC requirements should be no different for carriers that are not incumbent LECs," the FCC has taken a consistent stand against service quality plans, COLR obligations, and tariff filing as prerequisites to ETC status.¹³⁴ The FCC has stated the matter as plainly as possible: "a new entrant can make a reasonable demonstration . . . of its capability and commitment to provide universal service without the actual provision of the proposed service."¹³⁵

D. Advertising

Advertising presents another point of potential controversy in the administration of the universal service program. The Telecommunications Act requires that a "common carrier designated as an eligible telecommunications carrier ... shall, throughout the service area for which the designation is received ... advertise the availability of such services and the charges therefore using media of general distribution."¹³⁶ Again,

328

^{131.} See 47 U.S.C. § 214(e) (2000); 47 C.F.R. 54.203 (2002).

^{132.} W. Wireless Corp., 16 F.C.C.R. 18,145, 18,153 (2001).

^{133.} S.D. Preemption Order, supra note 117, at 15,174.

^{134.} Id. at 15,174-75.

^{135.} *Id.* at 15,178; *accord* Cellular S. License, Inc., 17 F.C.C.R. 24,393, 24,399 (2002); RCC Holdings, Inc. 17 F.C.C.R. 23,532, 23,538 (2002).

^{136. 47} U.S.C. § 214(e)(1)(B) (2000).

Minnesota's experience illustrates the anticompetitive potential inherent in state implementation of federal law. The Minnesota Public Utilities Commission has acknowledged that designation of an ETC must *precede* any legal "obligation to offer and advertise ... services" supported by the federal USF.¹³⁷ A contrary rule requiring a carrier to advertise its services *before* designation as an ETC would be "inherently anti-competitive."¹³⁸ "[R]equiring [CETCs] to serve [or advertise] without providing the subsidies that make that service possible would, for all practical purposes, give incumbents a lock on serving high-cost areas"¹³⁹ Nor is it self-evident that regulators can effectively prescribe "specific, uniform methods by which [all] eligible telecommunications carriers" must advertise their services, for "a method that is reasonably designed to reach... subscribers in one location may not be effective in reaching ... subscribers in another location."

Cognizant of the anticompetitive potential latent in burdensome advertising requirements, the FCC has explicitly refused to impose advertising requirements and other "eligibility criteria beyond those set forth in section 214(e)."¹⁴¹ For this reason, the Commission has construed the obligation to advertise the Lifeline and Link Up support programs for qualifying low-income consumers¹⁴² as a legal requirement binding only those carriers that have already been designated as ETCs.¹⁴³ It is the act of designating a new ETC, and not the imposition of anticompetitive advertising requirements, that "increases the likelihood that qualified low-income subscribers have a choice of service providers."¹⁴⁴ The FCC has understood that the 1996 Act's advertising mandate, especially when coupled with the requirement that all ETCs be "common carriers,"¹⁴⁵ reinforces legal safeguards against the abuse of universal service funding to engage in "cherry-picking" or "cream-skimming" for low-cost, high-profit

143. *See* Cellular S. License, Inc., 17 F.C.C.R. 24,393, 24,401 (2002) (declining to require a carrier "to publicize Lifeline and Linkup [*sic*] until it is designated as an ETC").

^{137.} Minn. Cellular Corp., 1999 WL 1455080, at *5 (Minn. Pub. Utils. Comm'n, Oct. 27, 1999).

^{138.} Id., at *6.

^{139.} Id.

^{140.} Promoting Deployment & Subscribership in Unserved & Underserved Areas, Including Tribal & Insular Areas, 15 F.C.C.R. 12,208, 12,250 (2000) [hereinafter *Promoting Deployment & Subscribership*].

^{141.} Cellco P'ship d/b/a Bell Atl. Mobile, 16 F.C.C.R. 39, 43-44 (2000) [hereinafter *Cellco*].

^{142.} See 47 C.F.R. § 54.405(b) (2002) (Lifeline); *id.* § 54.411(d) (Link Up). See generally Promoting Deployment & Subscribership, 15 F.C.C.R. at 12,248-51.

^{144.} Cellco, 16 F.C.C.R at 44.

^{145.} See 47 U.S.C. § 214(e)(1) (2000).

customers.¹⁴⁶ Thanks to the effectiveness of independent legal safeguards against ETCs' misuse of universal service funds to cross-subsidize nonsupported activities, federal and state regulators can (and should) forgo potentially anticompetitive requirements such as the forced unbundling of CETC service offerings¹⁴⁷ and the demand that each ETC offer "at least one 'stripped down' telecommunications package."¹⁴⁸ Finally, "given that ETCs receive universal service support only to the extent that they serve customers," they have "strong economic incentives . . . , in addition to the statutory obligation, to advertise the universal service offering" without further regulatory prompting.¹⁴⁹

Federal law prohibits a state commission from requiring a carrier to advertise USF-supported services in advance of and as a condition of ETC designation. According to the Telecommunications Act, "[a] State may adopt regulations to provide for additional definitions and standards to preserve and advance universal service within that State only to the extent that such regulations adopt additional specific, predictable, and sufficient mechanisms to support such definitions or standards that do not rely on or burden Federal universal service support mechanisms."¹⁵⁰ Like an unlimited local usage rule, an advance advertising rule would seriously impair the operation of the federal universal service program.

III. DETERMINING THE PUBLIC INTEREST

I now return to this article's central question: how should federal and state regulators determine the "public interest"? The designation of a second or subsequent ETC in a rural market requires an explicit finding under 47 U.S.C. § 214(e) that such a designation is in the public interest.¹⁵¹ Competition in telecommunications should flourish in conjunction with universal service, not struggle in spite of it. Administration of the federal universal service program must not impair, much less preclude, competitive entry by wireless carriers. Under current legal, economic, and technological conditions, however, not all ETCs stand on equal footing. The earliest wave of ETC designations in virtually all rural markets involved incumbent carriers relying on wireline technology. Competitive carriers providing

^{146.} See Cellco, 16 F.C.C.R. at 43-44; see also 47 U.S.C. § 254(k) (2000) ("A telecommunications carrier may not use services that are not competitive to subsidize services that are subject to competition.").

^{147.} See Cellco, 16 F.C.C.R. at 44-45; First Report & Order, supra note 65, at 8824.

^{148.} Minn. Cellular Corp., 1999 WL 1455080, at *8 (Minn. Pub. Utils. Comm'n, Oct. 27, 1999).

^{149.} W. Wireless Corp., 16 F.C.C.R. 18,145, 18,133, 18137 (2001); *accord, e.g.*, Cellular S. License, Inc., 17 F.C.C.R. 24,393, 24,401-02 (2002); RCC Holdings, Inc., 17 F.C.C.R. 23,532, 23,540 (2002); *Cellco*, 16 F.C.C.R. at 44, 45.

^{150. 47} U.S.C § 254(f) (2000).

^{151.} Id. § 214(e)(2), (6); see also supra text accompanying notes 81-84.

telecommunications service in these markets often deploy wireless technology. Any method of preserving and advancing universal service in these markets must uphold all components of the public interest, including neutrality as between incumbent and competitive carriers, technological neutrality, portability of support, and rural-urban parity. Any approach that effectively equates the "public interest" with incumbent protection or with the perpetuation of wireline carriage therefore constitutes an unreasonable interpretation of the 1996 Act.

Both the FCC and its state-law counterparts must conduct the public interest analysis required by section 214(e) according to statutory baselines established by the 1996 Act and by other provisions of the Communications Act of 1934.¹⁵² The open-ended phrase "public interest" takes its "meaning from the purposes of the regulatory legislation" that defines the relevant agency's responsibilities.¹⁵³ Statutory "policy is the yardstick by which the correctness of" a regulatory agency's "actions will be measured."154 Although the public interest standard in federal communications law is "a supple instrument for the exercise of discretion by [an] expert body," it is likewise a charter by "which Congress has charged" the FCC and the states "to carry out its legislative policy."¹⁵⁵ The public interest "criterion is not to be interpreted as setting up a standard so indefinite as to confer an unlimited power."¹⁵⁶ Rather than indulge the "mistaken assumption that" a statutory invocation of the public interest "is a mere general reference to public welfare without any standard to guide determinations," a state commission must confine its analysis to "[t]he purpose of the [Telecommunications] Act, the requirements it imposes, and the context of the provision[s] in question."157

A statute-based approach to determining the public interest binds any legal entity authorized to conduct such an analysis. The FCC, other federal agencies, and the states must all heed congressional directives. Congress did not give states *carte blanche* to render decisions wholly divorced from federal law. "Congress [never] intended for state commissions to have unlimited discretion" to determine the public interest in connection with petitions for ETC designation in rural areas.¹⁵⁸ The failure to adopt a "limiting standard, rationally related to the goals of the Act," in interpreting

^{152.} Communications Act of 1934, Pub. L. No. 73-416, 48 Stat. 1064 (codified as amended in 47 U.S.C. §§ 151-614 (2003), and scattered sections of 47 U.S.C.).

^{153.} NAACP v. FPC, 425 U.S. 662, 669 (1976); *accord, e.g.*, Office of Communication of the United Church of Christ v. FCC, 707 F.2d 1413, 1427 (D.C. Cir. 1983); Bilingual Bicultural Coalition on Mass Media, Inc. v. FCC, 595 F.2d 621, 628 & n.22 (D.C. Cir. 1978).

^{154.} Schaffer Transp. Co. v. United States, 355 U.S. 83, 88 (1957).

^{155.} FCC v. Pottsville Broad. Co., 309 U.S. 134, 138 (1940); accord FCC v. WNCN Listeners Guild, 450 U.S. 582, 593 (1981).

^{156.} Fed. Radio Comm'n v. Nelson Bros. Bond & Mortgage Co., 289 U.S. 266, 285 (1933).

^{157.} N.Y. Cent. Secs. Corp. v. United States, 287 U.S. 12, 24 (1932).

^{158.} S.D. Preemption Order, supra note 117, at 15,180.

the public interest constitutes reversible error.¹⁵⁹ That a state commission is a creature of state law confers no immunity from the obligation to determine the public interest in accord with federal law. Any allegation that a state public utility commission's "determination is inconsistent with [the Telecommunications Act of 1996] and its implementing regulations" unequivocally "involves [a] federal [legal] question," subject to review and resolution in a federal forum.¹⁶⁰

Finally, in light of *Chevron U.S.A., Inc. v. Natural Resources Defense Council*,¹⁶¹ courts must defer to reasonable interpretations by the FCC of the term "public interest." The phrase "public interest," after all, is a statutory term. The FCC has reasoned that Congress, "[i]n establishing a public interest requirement for those areas served by rural telephone companies," intended not so much to facilitate the denial of ETC designation petitions as to ensure "that consumers in rural areas continue to be adequately served should the incumbent carrier exercise its option to relinquish its ETC designation under section 214(e)(4)."¹⁶² As long as a petitioning carrier can "demonstrate[] both the commitment and ability to provide service to any requesting customer within the designated service area using its own facilities" and thereby ensure "that consumers in the affected rural areas will . . . continue to be adequately served should the incumbent carrier seek to relinquish its ETC designation," the public interest favors approval of the competitive ETC petition.¹⁶³

The appropriate scope of the public interest therefore depends on careful consideration of the minimum requirements and outer bounds of sections 214 and 254 of the Communications Act. The FCC's interpretation of those provisions provides further guidance. The failure to heed these interpretive yardsticks may lead to "false negatives" and "false positives" in an analysis of the public interest. A false negative would impair a state commission's ability to recognize how designating a competitive ETC would advance the public interest. The distinct problem of false positives, which is no less treacherous or probable than the prospect of false negatives, arises if a state commission introduces an irrelevant or improper factor into its public interest analysis. After addressing the problem of false negatives, I shall confront the issue of false positives.

332

^{159.} AT&T Corp. v. Iowa Utils. Bd., 525 U.S. 366, 388 (1999); accord Qwest Corp. v. FCC, 258 F.3d 1191, 1202 (10th Cir. 2001).

^{160.} BellSouth Telecomms., Inc. v. MCImetro Access Transmission Servs., Inc., 317 F.3d 1270, 1278 (11th Cir. 2003). *See generally* Verizon Md., Inc. v. Public Serv. Comm'n of Md., 535 U.S. 635 (2002).

^{161. 467} U.S. 837 (1984).

^{162.} W. Wireless Corp., 16 F.C.C.R. 18,145, 18,139 (2001); *accord, e.g.*, Cellular S. License, Inc., 17 F.C.C.R. 24,393, 24,402-03 (2002); RCC Holdings, Inc., 17 F.C.C.R. 23,532, 23,541 (2002).

^{163.} RCC Holdings, 17 F.C.C.R. at 23,541.

I will first examine two broad categories of factors that *must* be considered in a proper public interest analysis. Competitive neutrality, which embraces neutrality as between service providers and technological neutrality, is perhaps the most expansive and most important of these factors. Parity as between rural and urban consumers also plays a vital role. In the last section of Part III, I will examine a factor that state regulators must *not* consider when assessing the public interest. Because competitive carriers do not begin on equal footing *vis-à-vis* incumbents in the quest for ETC status, inquiring into the fiscal impact of additional ETC designations on the Universal Service Fund poses a singularly powerful threat to competitive neutrality. Any consideration of financial pressure on the USF should therefore be banished from determinations of the public interest.

A. Competitive Neutrality and Consumer Choice

1. Neutrality as Between Service Providers

Competitive neutrality and consumer choice may be the most important components of the public interest. Though not explicitly mentioned in the Telecommunications Act of 1996, competitive neutrality and consumer choice animate the seven universal service principles that are specified in the statute:

- 1. The availability of "[q]uality services . . . at just, reasonable, and affordable rates."
- 2. "Access to advanced telecommunications and information services . . . in all regions of the Nation."
- 3. The goal of ensuring parity among "[c]onsumers in all regions of the Nation, including low-income consumers and those in rural, insular, and high cost areas," so that these consumers may "have access to telecommunications and information services, including interexchange services and advanced telecommunications... services, that are reasonably comparable to those services provided in urban areas and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas."
- 4. The principle that "[a]ll providers of telecommunications services should make an equitable and nondiscriminatory contribution to the preservation and advancement of universal service."
- 5. The existence of "specific, predictable and sufficient Federal and State mechanisms to preserve and advance universal service."

- 6. Access for "[e]lementary and secondary schools and classrooms, health care providers, and libraries... to advanced telecommunications services."
- 7. "Such other principles as the Joint Board and the [Federal Communications] Commission determine are necessary and appropriate for the protection of the public interest, convenience, and necessity...."¹⁶⁴

"Competitive neutrality" plays a crucial role in the determination of the public interest. Exactly once have the Federal-State Joint Board on Universal Service and the FCC exercised their authority to adopt additional universal service principles as "are necessary and appropriate for the protection of the public interest, convenience, and necessity."¹⁶⁵ In its initial report and order on universal service, the FCC accepted the Joint Board's recommendation to adopt "competitive neutrality" as a seventh universal service principle in addition to the six statutory principles outlined in the 1996 Act itself.¹⁶⁶

Competitive neutrality, "in the context of determining universal service support," is defined as follows: "Universal service support mechanisms and rules should be competitively neutral. In this context, competitive neutrality means that universal service support mechanisms and rules neither unfairly advantage nor disadvantage one provider over another, and neither unfairly nor disfavor one technology over another."¹⁶⁷ In adopting this principle, the FCC observed that some form of competitive neutrality already pervades many other provisions of the 1996 Act. In particular, neutrality permeates the requirement that universal service support be "explicit,"¹⁶⁸ the requirement that state universal service contributions be "equitable and nondiscriminatory,"¹⁶⁹ and the availability of ETC status to any carrier that meets the criteria stipulated in the Act.¹⁷⁰

The principle of competitive neutrality contains two distinct components: neutrality as between service providers, plus technological neutrality. Regulators must take care not only to treat competitive carriers on an equal basis *vis-à-vis* incumbent carriers, but also to avoid privileging any technology over another. Technological neutrality offers two distinct benefits. First, by "allow[ing] the marketplace to direct the advancement of technology," technological neutrality will enhance consumer choice.¹⁷¹

^{164. 47} U.S.C. § 254(b) (2000).

^{165.} Id. § 254(b)(7).

^{166.} See First Report & Order, supra note 65, at 8801; cf. 47 U.S.C. § 254(b)(1)-(6) (2000).

^{167.} First Report & Order, supra note 65, at 8801.

^{168. 47} U.S.C. § 254(e) (2000).

^{169.} *Id.* § 254(f).

^{170.} Id. § 214(e); see also First Report & Order, supra note 65, at 8801.

^{171.} First Report & Order, supra note 65, at 8802.

Second, technological neutrality improves the public administration of universal service by helping regulators to "avoid limiting providers of universal service to modes of delivering that service that are obsolete or not cost effective."¹⁷² The FCC expected that its "policy of technological neutrality" would "foster the development of competition" and deter the unfair exclusion of "certain providers, including wireless" carriers, "that may have been excluded from participation in universal service mechanisms if . . . universal service eligibility criteria" had been interpreted "so as to favor particular technologies."¹⁷³

The FCC maintained its commitment to competitive neutrality in the context of CETC designations by state commissions for rural areas. During public commentary on what became the First Report & Order on universal service, the Rural Telephone Coalition urged that the promotion of competition in rural areas be considered "secondary to the advancement of universal service."¹⁷⁴ The FCC rejected this suggestion as "present[ing] a false choice between competition and universal service."175 Rather, the Commission predicted, "competitive neutrality will promote emerging technologies that, over time, may provide competitive alternatives in rural, insular, and high cost areas and thereby benefit rural consumers."176 Consistent with the *First Report & Order*'s endorsement of technological neutrality as an essential component of the public interest, the FCC regulation that guides state commissions in designating ETCs expressly prohibits discrimination on the basis of a petitioning carrier's technological platform: "A state commission shall designate a common carrier that meets the requirements of this section as an eligible telecommunications carrier irrespective of the technology used by such carrier."177

As components of the public interest, competitive neutrality and consumer choice are closely related, if not virtually synonymous. Regulators can best honor the requirement of competitive neutrality by ensuring that the decision whether to grant a petition for ETC designation hinges on those factors that rational consumers weigh in choosing between an incumbent service provider and a new competitor: superior price, quality, and support.¹⁷⁸ The public interest depends on consumer choice, not on

^{172.} Id.

¹⁷³*. Id.*

^{174.} Id. at 8802-03.

^{175.} Id. at 8803.

^{176.} Id.

^{177. 47} C.F.R. § 54.201(h) (2002).

^{178.} Cf. Minn. Cellular Corp., 1999 WL 1455080, at *13 (Minn. Pub. Utils. Comm'n, Oct. 27, 1999) (acknowledging how a prospective CETC "made a threshold showing of affordability, reliability, and service quality" as well as "a threshold showing that its service would include specific features and enhancements not available, or available only at a premium, from the incumbents").

the competitive threat that a market entrant may pose to the incumbent local exchange company.

Equating the public interest with an unlawful call for incumbent protection is one of the most common errors in the law of economic regulation. This misapplication of the public interest standard is especially likely to occur when opponents of new service characterize existing networks as "adequate," describe new infrastructure as "redundant" or "duplicative," or undervalue the advantages offered by technologically diverse platforms. The law's proper focus on consumer welfare precludes assessments of the public interest that rest "on the bare conclusion that existing . . . service" is "adequate."¹⁷⁹ A survey of the relevant market's need for service must consider "the inherent advantages of the proposed service," lest regulators give incumbent service providers "unwarranted protection from competition from others."¹⁸⁰

Lower prices also matter. "The ability of one mode of [communication] to operate with a rate lower than competing types of [communication] is precisely the sort of 'inherent advantage' that... congressional policy" seeks to foster.¹⁸¹ The law of regulated industries recognizes a strong public interest in the "lower cost of equipment, operation, and therefore service" as one of the "inherent advantages" of any mode of communication.¹⁸² In sum, "no carrier is entitled to protection from competition in the continuance of a service that fails to meet a public need, nor, by the same token, should the public be deprived of a new and improved service because it may divert some traffic from other carriers.^{*183}

Consumer choice, as measured by the market-driven decisions of a substantial majority of residential customers, is an essential component of the public interest. Congress has directed the Joint Board and the FCC to consider, *inter alia*, "the extent to which such telecommunications services . . . have, *through the operation of market choices by customers*, been subscribed to by a substantial majority of residential customers."¹⁸⁴ Technological innovations by service providers are also relevant, for the Joint Board and the FCC must also consider "the extent to which . . . telecommunications services . . . are being deployed in public telecommunications networks by telecommunications carriers."¹⁸⁵ Again, the primacy of consumer choice in public interest analysis precludes the assumption that the terms and conditions of service provided by a

^{179.} Schaffer Transp. Co. v. United States, 355 U.S. 83, 90 (1957).

^{180.} Id. at 91.

¹⁸¹*. Id.*

^{182.} ICC v. Mechling, 330 U.S. 567, 575 (1947); *accord* Dixie Carriers, Inc. v. United States, 351 U.S. 56, 59 (1956).

^{183.} Schaffer, 355 U.S. at 91 (internal quotation marks omitted).

^{184. 47} U.S.C. § 254(c)(1)(B) (2000) (emphasis added).

^{185.} Id. at § 254(c)(1)(D).

competitive carrier should match the terms and conditions offered by an incumbent ETC. Diversity among options for "local usage" including but not limited to variations in price, the number of minutes available without additional charge, the geographic boundary between local and long distance service, and the ability to make and receive calls while away from home should be considered as having a positive rather than negative impact on the public interest.

Because many localities, especially in rural America, are still served by no more than one telecommunications carrier, an additional carrier's commitment to serve all customers represents a very significant improvement in consumer choice. From the passage of the Communications Act of 1934 to the termination of the Modified Final Judgment that supervised the breakup of the Bell System,¹⁸⁶ local telephony remained the most intractable monopoly in the American economy.¹⁸⁷ Opening local telecommunications markets to competition thus represented the centerpiece of the Telecommunications Act.¹⁸⁸ The increase in competition and market choice since 1996 has benefited consumers in numerous ways, ranging from reduced prices to improved service and technological innovation. Perhaps more than any other development during the past seven years, the opening of local telecommunications markets has directly advanced the purposes Congress articulated in the preamble to the Telecommunications Act of 1996: to "promote competition and reduce regulation," "secure lower prices and higher quality services ... and encourage the rapid deployment of new telecommunications technologies."189

^{186.} See Telecommunications Act of 1996, Pub. L. No. 104-104, § 601, 110 Stat. 56, 143-44 (terminating the Modified Final Judgment, among other antitrust decrees).

^{187.} See Verizon Communications, Inc. v. FCC, 535 U.S. 467, 475-76 (2002) ("The [Bell breakup] decree did nothing... to increase competition in the persistently monopolistic local markets, which were thought to be the root of natural monopoly in the telecommunications industry.").

^{188.} See AT&T Corp. v. Iowa Util. Bd., 525 U.S. 366, 371 (1999).

^{189.} Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56, 56 (preamble).

2. Technological Neutrality

The FCC has demanded technological neutrality when state commissions review ETC designation petitions. The agency's unambiguous rule on this point bears repeating: "A state commission shall designate a common carrier that meets the requirements of this section as an eligible telecommunications carrier irrespective of the technology used by such carrier."¹⁹⁰ True to this directive, the Minnesota Public Utilities Commission has historically acknowledged its duty "under the [Telecommunications] Act and the FCC rules... to refrain from discriminating against [ETC] applicants on the basis of technology."¹⁹¹

Fidelity to technological neutrality means that a state commission, when considering a petition by a wireless carrier to be designated as an ETC, cannot impose conditions or adopt policies that would burden the wireless petitioner in ways that an incumbent wireline carrier is not burdened. Opportunities to apply or violate the technological neutrality principle abound. For instance, if a wireline carrier is eligible to receive USF support for a metered local usage plan, a wireless carrier must be equally eligible. Similarly, state commissions must not reflexively oppose competitive measures that exploit the comparative advantage of wireless carriers relative to their wireline competitors. Competition over expanded local calling areas, system features, and other customer options is essential to the ability of wireless carriers to compete against wireline incumbents. In addition, a state commission may not demand that a wireless carrier connect a new customer in a shorter time frame than that required of the wireline LEC.

A state commission may not condition the designation of a competitive wireless carrier as an ETC on the fulfillment of requirements that have no technological analogue in a wireline platform. It is absurd, for example, to base a wireless carrier's eligibility for federal universal service support on its decision to offer its customers a .6-watt handheld unit instead of a 3-watt phone. Frivolously contesting the adequacy of customer premises equipment offered by rivals is one of the oldest strategems known to incumbent carriers.¹⁹² One might have thought wrongly, it seems that

^{190. 47} C.F.R. § 54.201(h) (2002).

^{191.} Minn. Cellular Corp., Docket No. P-5695/M-98-1285, slip op. at 8-10, 1999 WL 1455080, at *8 (Minn. Pub. Utils. Comm'n., Oct. 27, 1999); *see also id.* at *10 (expressing the MPUC's desire to avoid making designation decisions according to "the intrinsic characteristics of wireless technology").

^{192.} See, e.g., Hush-a-Phone Corp. v. United States, 238 F.2d 266, 269 (D.C. Cir. 1956) (describing the overly broad tariff provisions against foreign attachments as an "unwarranted interference with the telephone subscriber's right reasonably to use his telephone in ways which are privately beneficial without being publicly detrimental"); Use of the Carterfone Device in Message Toll Tel. Servs., 14 F.C.C.2d 571, 572-73 (1968) (striking the foreign attachment tariffs in their entirety after AT&T failed to produce concrete proof of a "cream skimming"

telecommunications law had long ago won the war to liberate the market for "equipment known to the Bell Telephone-Western Electric complex as 'foreign attachments."¹⁹³ This anticompetitive litigation tactic has no place in the deregulatory environment established by the 1996 Act.

The FCC's 2000 order in *Cellco*¹⁹⁴ vividly illustrates the requirements of technological neutrality. In that proceeding, the Commission squarely "reject[ed] the contention" that a wireless carrier "lacks the 'requisite quality and reliability' because it relies on a 'handheld' cellular technology."¹⁹⁵ The FCC found "[n]o credible evidence" supporting the exclusion of wireless providers from eligibility for USF support "due to [the] alleged technological limitations of mobile service."¹⁹⁶ Ultimately, the FCC rejected an even more aggressive ILEC proposal to "impose a 'landline substitutability' requirement" that would have erected a massive barrier to CETC designation without providing any functional benefit to consumers.¹⁹⁷

The public interest depends on the development, deployment, and "provision of new technologies and services to the public."¹⁹⁸ At the very least, an entire body of law dedicated to reforming markets "affected with a public interest"¹⁹⁹ should be interpreted so as to favor rapid technological innovation over incumbent protection.²⁰⁰ Congress explicitly contemplated that the definition of universal service would change over time. According to the 1996 Act, "[u]niversal service is an evolving level of telecommunications services that the Commission shall establish periodically ..., taking into account advances in telecommunications and information technologies and services."²⁰¹ The legislative history of the Telecommunications Act makes it abundantly clear "that the definition of universal service [should] evolve[] over time to keep pace with modern

effect" that outweighed "the benefits of interconnection"); Use of Recording Devices in Connection with Telephone Servs., 11 F.C.C. 1033, 1036 (1948) (invalidating foreign attachment provisions that prohibited recording devices with no "perceptible effect on the functioning of the telephone apparatus or the quality of the telephone service"). *See generally* Chen, *supra* note 48, at 843-44.

^{193.} Applications of Microwave Communications, Inc., 18 F.C.C.2d 953, 978 (1969) (statement of Johnson, Comm'r).

^{194.} Cellco P'ship d/b/a Bell Atl. Mobile, 16 F.C.C.R. 39 (2000).

^{195.} Id. at 43.

^{196.} Id.

¹⁹⁷*. Id.* at 44.

^{198. 47} U.S.C. § 157(a) (2000); see Hausman & Shelanski, supra note 54, at 27-28.

^{199.} Munn v. Illinois, 94 U.S. 113, 130 (1876).

^{200.} Cf. DANIEL A. FARBER, ECO-PRAGMATISM: MAKING SENSIBLE ENVIRONMENTAL DECISIONS IN AN UNCERTAIN WORLD 123-27 (1999) (urging the adoption of an interpretive canon counseling the construction of environmental statutes in favor of more robust environmental protection).

^{201. 47} U.S.C. § 254(c)(1) (2000).

life.^{"202} Periodic revisions in "the list of telecommunications and information services included in the definition of universal service" help "ensure that all Americans share in the benefits of the information superhighway."²⁰³ Ultimately, Congress "intend[ed] the definition of universal service" to evolve so as

to ensure that the conduit, whether it is a twisted pair wire, coaxial cable, fiber optic cable, wireless, or satellite system, has sufficient capacity and technological capability to enable consumers to use whatever consumer goods that they have purchased, such as a telephone, personal computer, video player, or television, to interconnect to services that are available over the telecommunications network.²⁰⁴

The Senate's deliberations over telecommunications reform highlight the technologically dynamic nature of universal service. The Senate Commerce Committee acknowledged that "touch tone telephone service is widely available today and is used by a substantial majority of residential customers to access services like voice mail, telephone banking, and mail order shopping services." $^{205}\,$ Just as the current state of technology and its adoption by a substantial majority of residential customers preclude acceptance of conventional "rotary party line service as sufficient to meet the minimum definition of universal service," touch tone service itself might eventually fail to "satisfy the evolving definition of universal service if the substantial majority of residential consumers use" more advanced means of communication.²⁰⁶ Even if contemporary technology and consumer preferences fall short of the "two-way interactive full motion video service" that the Senate contemplated,²⁰⁷ no assessment of the public interest can ignore changes in technological capacity and consumer choice.

Courts have long understood that the public interest standard does not permit a regulatory agency "to penalize innovation and ignore the . . . benefits resulting from such innovation by declaring each new and innovative service offering or operating mode a discrete submarket subject to unique regulatory . . . treatment."²⁰⁸ The extensive attention that Congress lavished upon technological evolution in defining universal service makes it essential that public interest analysis in the context of federal support for universal service remain dynamic.

^{202.} S. CONF. REP. NO. 104-230, at 128 (1996).

^{203.} S. REP. NO. 103-367, at 33 (1994).

^{204.} S. REP. NO. 104-230, at 27 (1995).

^{205.} Id.

^{206.} Id.

^{207.} Id.

^{208.} United States v. FCC, 652 F.2d 72, 99 (D.C. Cir. 1980) (quotes omitted).

Two specific features of the universal service program reflect the federal commitment to technological improvement. First, federal law strongly favors facilities-based competition. To qualify as an ETC, a carrier must either "us[e] its own facilities" or, at a minimum, combine "its own facilities" with "resale of another carrier's services."209 To state the point somewhat differently, no carrier that conducts its business solely by reselling services provided by another carrier can receive federal universal service support. The specifics of federal USF support reinforce the preference for facilities-based competition. The FCC's implementing regulations grant a competitive eligible telecommunications carrier "the full amount of universal service support that the incumbent LEC would have received for [a new] customer," but only to the extent that the CETC "provides the supported services using neither unbundled network elements purchased" from an ILEC "nor wholesale service purchased" from an ILEC.²¹⁰ The same conditions govern full support for CETC provision of USFsupported services previously delivered by an ILEC and the corresponding reduction of USF support to the ILEC in question.²¹¹ Neither the 1996 Act nor the FCC's implementing regulations prescribe the technological path by which a CETC is expected to deliver facilities-based competition. It suffices that a CETC build its own facilities, at least in part, so that consumers will enjoy alternative sources of telecommunications service and so that competitive and incumbent ETCs alike will have an incentive to improve the technological platforms on which their businesses rest.

Notably, federal telecommunications law recognizes the public interest in technological progress even when it is reflected in new services not directly supported by the federal universal service program. Although the FCC has declined to add "advanced or high-speed services" to the list of services supported by the USF,²¹² the Commission has reaffirmed the principle that federal "universal service policies should not inadvertently create barriers to the provision of [or] access to advanced services."²¹³ In other words, even if text messaging and wireless Internet access currently fall outside the list of services supported by the USF, the federal universal

^{209. 47} U.S.C. § 214(e)(1)(A) (2000).

^{210. 47} C.F.R. § 54.307(a)(3) (2002).

^{211.} See id. § 54.307(a)(4).

^{212.} See Fed.-State Joint Bd. on Universal Serv., 17 F.C.C.R. 14,095, 14,102 (2002) [hereinafter July 2002 Recommended Decision]. In a notice of proposed rulemaking released February 25, 2003, the FCC solicited public comment on whether one of the services at issue in the July 2002 Recommended Decision — namely, equal access to interexchange service — satisfies the statutory criteria named in 47 U.S.C. § 254(c). See Fed.-State Joint Bd. on Universal Serv., 18 F.C.C.R. 2932 (2003).

^{213.} *MAG Plan Order, supra* note 76, at 11,244, 11,322 (2001); *accord July 2002 Recommended Decision*, 17 F.C.C.R. at 14,102.

service program encourages "the deployment of modern plant capable of providing access to [such] services."²¹⁴

The consideration of technological advancement in the designation of an eligible telecommunications carrier promotes the public interest in community health and safety. Congress directed that the evolving definition of universal service should consider "the extent to which [federally supported] telecommunications services . . . are essential to education, public health, or public safety."²¹⁵ Within the narrow scope of their authority to impose "competitively neutral . . . requirements necessary to preserve and advance universal service," states may adopt measures to "protect the public safety and welfare."²¹⁶ In this regard, the dramatic improvement in access to emergency services such as 911 and "enhanced" 911²¹⁷ that would be realized upon full deployment of a competitive carrier's wireless platform strongly supports the public interest in the designation of that carrier as an eligible telecommunications carrier.

B. Rural-Urban Parity

Congress has also identified a strong public interest in rural-urban parity. In designing the federal universal service program, Congress showed considerable solicitude toward rural residential customers. Long distance as well as local service is an integral component of universal service. If anything, rural parity with urban long distance customers won a lion's share of congressional attention during the formulation of the 1996 Act. Congress directed the FCC to "adopt rules to require that the rates charged by providers of interexchange telecommunications services to subscribers in rural and high cost areas shall be no higher than the rates charged by each such provider to its subscribers in urban areas."218 This provision was designed "to incorporate the policies of geographic rate averaging and rate integration of interexchange services" so that rural and high cost subscribers would be "able to continue to receive both intrastate and interstate interexchange services at rates no higher than those paid by urban subscribers."219 The cascade of legal terms beginning with the prefixes "intra-" and "inter-" ought not obscure the bottom line: Congress took pains to ensure that rural residential customers would not be disadvantaged vis-à-

^{214.} MAG Plan Order, supra note 76, at 11,322; accord July 2002 Recommended Decision, 17 F.C.C.R. at 14,102 (2002).

^{215. 47} U.S.C. § 254(c)(1)(A) (2000).

^{216.} Id. § 253(b).

^{217.} See 47 C.F.R. § 54.101(a)(5) (2002) (identifying access to emergency services, including 911 and enhanced 911, as one of nine supported services under the federal universal service program).

^{218. 47} U.S.C. § 254(g) (2000).

^{219.} S. CONF. REP. NO. 104-230, *supra* note 202, at 132.

vis their urban counterparts when calling outside an ILEC's local calling area. Designation of a CETC therefore advances the public interest to the extent the entrant can carry calls that an ILEC would treat as intraLATA or even interLATA long distance.²²⁰ Put somewhat differently, a CETC's ability to provide a local calling area that exceeds the technologically constrained geographic footprint of a wireline-based ILEC represents a significant positive contribution to the public interest. After all, a new wireless carrier's local calling area is often larger than the local area served by the wireline ILEC.²²¹ Providing deeper geographic reach for the same local subscription rate delivers a significant benefit to the consumer.

Public policy considerations reinforce the 1996 Act's explicit inclusion of long distance calling and/or larger local calling areas within the statutory definition of the public interest. Given the greater geographic scope of many rural dwellers' daily lives, Congress's concern with calling outside the boundaries of ILEC exchanges (and, by extension, the ability to roam with wireless telephony while traveling) reflects sound public policy. Statically depicting universal service as local exchange access in the sense of "plain old telephone service," or POTS, also ignores the value that accrues to rural residents when others traveling in their communities are able to use new wireless infrastructure to roam.²²² Each individual consumer of telecommunications services, including low-income and/or high-cost consumers, benefits from a network that embraces the highest possible number of users, regardless of whether other users share any individual consumer's characteristics.²²³

Wireless platforms offer an economically rational and highly efficient method of intermodal competition in local telephony, particularly in rural and other high-cost areas. Wireless telecommunications media perform most effectively where dispersed populations, forbidding climates, or "unaccommodating" terrain compromises the effectiveness of a wireline

^{220.} The acronym LATA stands for "local access and transport area." The Modification of Final Judgment, which forced the Bell system to divest its local exchange company affiliates, prohibited the newly created Bell operating companies from carrying long-distance calls across LATA boundaries. *See* United States v. W. Elec. Co., 569 F. Supp. 1057, 1108 (D.D.C. 1983). Under the Bell breakup decree, however, calls *within* a LATA remained fair game. As a result, even though the Bell operating companies were barred from interLATA carriage, their "financial viability" hinged in large part on long-distance revenues from intraLATA carriage. United States v. W. Elec. Co., 569 F. Supp. 990, 995 n.23 (D.D.C. 1983).

^{221.} See WWC Holding Co. f/k/a/ Minn. Cellular Corp., Docket No. P-5695/M-98-1285, slip op. at 6, 2000 WL 668286, at *4 (Minn. Pub. Utils. Comm'n, April 19, 2000).

^{222.} See HENK BRANDS & EVAN T. LEO, THE LAW AND REGULATION OF TELECOMMUNICATIONS CARRIERS 703 (1999) (providing definitions of POTS ("plain old telephone service") and PANS ("pretty amazing new services")).

^{223.} See Tex. Office of Pub. Util. Counsel v. FCC, 183 F.3d 393, 406 n.2 (5th Cir. 1999); Eli M. Noam, Will Universal Service and Common Carriage Survive the Telecommunications Act of 1996?, 97 COLUM. L. REV. 955, 958-59 (1997). See generally Lemley & McGowan, supra note 26.

platform and raises its operating costs.²²⁴ At least under the existing state of communications technology, wireless platforms promise the most economically robust alternative to the ILECs' wireline legacy networks.²²⁵ By extending "the full amount of universal service support that [an] incumbent LEC would... receive[]" per customer to a "competitive eligible telecommunications carrier that provides... supported services using neither unbundled network elements... nor wholesale service" purchased from an ILEC, the federal universal service program strongly favors this very sort of facilities-based competition.²²⁶

Opponents of CETC designations frequently suggest, first, that sparse population spreads costs so thinly in rural areas that competitive carrier capture of ILEC lines would increase the per-line cost of serving the remaining lines increases and, second, that this "harm" to an incumbent carrier outweighs any benefits derived from competition.²²⁷ In other words, the more remote the area, the more important it is to have exactly one carrier. Taken to their logical conclusions, these arguments counsel *per se* rejection of *all* petitions for CETC designation in rural areas. Such a refusal to embrace competitive entry into rural markets, however, is tantamount to rejecting one of the fundamental tenets of the federal universal service program: rural-urban parity.²²⁸

As matters stand, rural consumers do not enjoy parity with their urban counterparts. The very reason high-cost support is needed is because it is very expensive to provide service to rural areas.²²⁹ The FCC has deemed it "unreasonable to expect an unsupported carrier to enter a high-cost market and provide a service that its competitor" typically an incumbent "already provides at a substantially supported price."²³⁰ The paradigmatically procompetitive phenomenon of wireless-for-wireline substitution relies on universal service support and the ETC designation process that controls

228. See 47 U.S.C. § 254(b)(2) (2000).

344

^{224.} See Alenco Communications, Inc. v. FCC, 201 F.3d 608, 617 (5th Cir. 2000) ("Rural areas where telephone customers are dispersed and terrain is unaccommodating are ... the most expensive to serve.").

^{225.} See, e.g., Lisa M. Warner, Wireless Technologies Creating Competition in the Local Exchange Market: How Will Local Exchange Carriers Compete?, 4 COMMLAW CONSPECTUS 51, 52 (1996); Eric Thoreson, Comment, Farewell to the Bell Monopoly? The Wireless Alternative to Local Competition, 77 OR. L. REV. 309, 336 (1998).

^{226. 47} C.F.R. § 54.307(a)(3), (4) (2002).

^{227.} *Cf. MAG Plan Order, supra* note 76, at 11,244, 11,326 ("[A]s an incumbent 'loses' lines to a competitive eligible telecommunications carrier, the incumbent must recover its fixed costs from fewer lines, thus increasing its per-line costs.").

^{229.} See Alenco, 201 F.3d at 617.

^{230.} S.D. Preemption Order, supra note 117, at 15,177); see also First Report & Order, supra note 65, at 8932 (acknowledging that competition and affordable access to telecommunications service in high-cost areas depend on competitive neutrality as between entrants and ILECs).

access to federal subsidies.²³¹ Although the federal universal service program has reduced some of the "differences in service costs between rural and urban markets," urban consumers continue to enjoy a choice of "at least two more competitors" offering wireless carriage relative to their rural counterparts.²³² Eliminating CETC designations in rural areas would betray the congressional promise that "rural, insular, and high-cost areas" should have services "reasonably comparable" to those available in urban areas and at "reasonably comparable" rates.²³³

The law cannot tolerate purported public interest arguments that systematically discriminate against carriers not only according to their competitive status, but also according to the technology that they deploy. At a minimum, it offends the principle of competitive neutrality to subsidize incumbent carriers while simultaneously depriving their competitors of universal service funding. At an extreme, the imposition by a state commission of "such onerous eligibility requirements that no otherwise eligible carrier could receive designation . . . would probably run afoul of" the commission's mandate under section 214(e)(2) to "designate" eligible carriers.²³⁴ Regardless of the precise theory by which it reaches this conclusion, federal law prohibits schemes under which incumbent carriers fight freestyle with public funding, while their competitors must contest high-cost markets according to Marquis of Queensbury rules.²³⁵

The baneful tendency to equate the public interest with incumbent protection arises from a fundamental misunderstanding of the nature of competition among publicly subsidized firms. Incumbent carriers routinely decry the introduction of competition in rural markets, including by extension of universal service support to competitive carriers, as a form of subsidized, "artificial competition."²³⁶ The trouble with condemning

^{231.} See Annual Report & Analysis of Competitive Mkt. Conditions with Respect to Commercial Mobile Servs., 16 F.C.C.R. 13,350, 13,438 & n.24 (2001); Annual Report & Analysis of Competitive Mkt Conditions with Respect to Commercial Mobile Servs., 15 F.C.C.R. 17,660, 17,788 & n.20 (2000).

^{232.} Annual Report & Analysis of Competitive Mkt. Conditions with Respect to Commercial Mobile Servs., 17 F.C.C.R. 12,985, 13,024 (2002).

^{233.} Id.

^{234.} Tex. Office of Pub. Util. Counsel v. FCC, 183 F.3d 393, 418 n.31 (5th Cir. 1999); *accord S.D. Preemption Order, supra* note 117, at 15,174 n.31; N.D. Pub. Serv. Comm'n, Case No. PU-1564-98-428, at ¶ 36 (Dec. 15, 1999).

^{235.} *Cf.* R.A.V. v. City of St. Paul, 505 U.S. 377, 392 (1992) (observing that constitutional protection of free speech prevents the government from "licens[ing] one side of a debate to fight freestyle, while requiring the other to follow Marquis of Queensbury rules").

^{236.} See, e.g., National Telecommunications Coop. Association, Press Release, *Telecom Industry Group Addresses Universal Service at Senate Hearing* (April 3, 2003) at http://www.ntca.org/press/releases/pr_040203.html (arguing that Congress should "[e]nsur[e] that current law be adhered to which mandates that universal service support be provided for actual cost recovery and not be used as a tool to incite artificial competition"); Hutchinson Tel. Co. & Telecomms., Inc., Press Release, at http://www.hutchtel.net/html/s_press_C.html (n.d.) (denouncing a Minnesota bill that allegedly "would impose artificial competition in areas where

universal service support for competitive carriers as "artificial," however, is that rural telephone companies are themselves the products of public policies consciously adopted and deliberately intended to subsidize telecommunications service in remote areas where the cost of delivering service is extremely high. Incumbent carriers cannot simultaneously condemn policies extending subsidies to their competitors and demand the continued flow of support to their own coffers. When an incumbent carrier depends so heavily upon public largesse, a public decision to subsidize a competitor is no more "artificial" than the incumbent's dominance of that market is "natural."

In spite of the evident benefits of technological neutrality, and in spite of the potential contribution of wireless carriers to rural markets, state regulators often misunderstand the relationship of these factors to the public interest. In each of its annual reports since 1999 on competition in the market for commercial mobile services, the FCC has recognized the increased profile of wireless carriers in the telecommunications market.²³⁷ The Commission has taken particular care to note that this procompetitive phenomenon relies on universal service support and on the ETC designations that are a prerequisite to qualification for financing from the USF. As competitive wireless carriers enlarge their share of the telecommunications market, incumbent wireline carriers have ever greater incentive to retaliate through the legal system. In the first of these annual reports, the FCC identified the potential of state-law rules governing ETC designations to "discriminat[e] unfairly against" wireless providers.²³⁸ Much of this discrimination stems from the introduction of unlawful factors into the public interest analysis that state regulators must perform when deciding whether to grant a competitive carrier's petition for designation as an ETC. The next section of this article will examine the leading example of an unlawful consideration in public interest analysis.

an efficient market can only support one provider"); Reply Comments of GTE Alaska Inc., Consideration of Market Structure Rules Governing Local Exch. Competition in Alaska, No. R-97-12, at 3 (Alaska Pub. Utils. Comm'n, Nov. 19, 1997) (opposing the revocation of all rural exemptions for telecommunications carriers in Alaska by arguing that "Alaskans will benefit most by fair policies that allow competitive markets to develop naturally rather than by artificial competition that is hurriedly manufactured by government edict"), *available at* http://www.state.ak.us/rca/telecomm/r97012/R97012.html; *cf.* Jonathan S. Adelstein, *Rural America and the Promise of Tomorrow*, Address at NTCA Annual Meeting and Expo (Feb. 3, 2003), *transcription available at* http://www.fcc.gov/commissioners/adelstein/speeches2003.html. ("Federal support is intended to promote universal service, not to subsidize artificial competition or, for that matter, to keep it at bay.").

^{237.} See Implementation of § 6002(B) of the Omnibus Budget Reconciliation Act of 1993, 16 F.C.C.R. 13,350, 13,438 & n.24 (2001); Implementation of § 6002(B) of the Omnibus Budget Reconciliation Act of 1993, 15 F.C.C.R. 17,660, 17,788 & n.20 (2000).

^{238.} See Implementation of § 6002(B) of the Omnibus Budget Reconciliation Act of 1993, 14 F.C.C.R. 10,145, 10,270 (1999).

C. The Financial Impact of ETC Designations

1. An Impermissible Factor

There is no legal basis for a state commission to consider the financial impact of a prospective ETC designation on the federal Universal Service Fund as a factor relevant to the public interest. The adequacy of *federal* funding for high-cost support in the *federal* Universal Service Fund is a question of *federal* law and policy that can and must be addressed solely by *federal* authorities. It is one thing for a state commission or the FCC to ignore one statutory principle in order "[t]o satisfy a countervailing statutory principle."²³⁹ It is an entirely different matter to place dispositive weight on a factor that not only lacks statutory support but also contradicts the firmly established public interest in competitive neutrality, consumer choice, and rural-urban parity.

The FCC's current rules do not treat the presumed financial impact of ETC designations on the Universal Service Fund as a component of the public interest. The FCC has repeatedly and consistently rebuffed calls to curb CETC designations in order to relieve financial pressure on the growth of the USF. In its *First Report & Order* on universal service, despite acknowledging that "overly expansive universal service mechanisms potentially could harm all consumers by increasing the cost of telecommunications services for all,"²⁴⁰ the FCC "reject[ed] proposals to establish a principle to minimize the size and growth of the universal service fund."²⁴¹ Instead, the Commission expressed its confidence in the ability of "competitive and market-based universal service techniques" to "limit the size of the support mechanisms by providing affordable, cost-effective telecommunications services in many regions of the nation that are now dependent upon universal service support."²⁴²

In 2001, the FCC explicitly declined to endorse a proposed moratorium on CETC designations in rural areas. This would-be moratorium, proposed by the Joint Board's Rural Task Force, was motivated by concern over allegedly excessive growth in the demand for federal universal service support.²⁴³ Among the plan's "significant

^{239.} Alenco Communications, Inc. v. FCC, 201 F.3d 608, 621 (5th Cir. 2000); see also Qwest Corp. v. FCC, 258 F.3d 1191, 1199 (10th Cir. 2001) ("The FCC may balance [statutory] principles against one another, but must work to achieve each one unless there is a direct conflict between it and either another listed principle or some other obligation or limitation on the FCC's authority.").

^{240.} First Report & Order, supra note 65, at 8829; see also Alenco, 201 F.3d at 620 (observing that "excess subsidization in some cases may detract from universal service by causing rates unnecessarily to rise, thereby pricing some consumers out of the market").

^{241.} First Report & Order, supra note 65, at 8805.

^{242.} Id. at 8806.

^{243.} See MAG Plan Order, supra note 76, at 11,293-99, 11,325-26.

drawbacks," the FCC reasoned that a moratorium on CETC designations would create "disincentives to infrastructure investment by rural carriers."²⁴⁴ In November 2002, the FCC invited full reconsideration of "the specific concerns raised [by] the Rural Task Force . . . regarding excessive growth in the fund."²⁴⁵ At the same time, however, the FCC unequivocally reaffirmed the principle that "[s]upport for competitive ETCs currently is not capped under the Commission's rules."²⁴⁶

Throughout these developments, the FCC has maintained a consistent approach to purported financial pressure stemming from the designation of CETCs in rural study areas. Concerns over the allegedly "unsustainable" growth in "demand on universal service funding," the FCC concluded in its most recent decisions to designate ETCs pursuant to section 214(e)(6), lie "beyond the scope of" proceedings whose sole task is to decide whether to "designate[] a particular carrier as an ETC."²⁴⁷

The lone fragments of federal legal support for the proposition that financial pressure on the universal service fund is relevant to the public interest consist of separate statements by two individual Federal Communications Commissioners. First, in a separate statement related to the FCC's 2001 MAG Plan Order, Commissioner Kevin J. Martin expressed "some concerns with the Commission's policy adopted long before [that] Order of using universal support as a means of creating 'competition' in high cost areas."²⁴⁸ Despite expressing "real pause" at the prospect that "subsidiz[ing] multiple competitors to serve areas in which costs are prohibitively expensive for even one carrier" might "lead[] to inefficient and/or stranded investment and a ballooning universal service fund," Commissioner Martin "sign[ed] on to an Order that may further this policy."249 Second, in remarks before the 2003 meeting of the National Telecommunications Cooperative Association, Commissioner Jonathan S. Adelstein announced his belief that the FCC should "ensure that the benefits that come from increasing the number of carriers we fund outweigh the burden of increasing contributions [from] consumers."²⁵⁰ The upshot of these separate statements by Commissioners Martin and Adelstein is that the FCC's prevailing policy of severing any discussion of financial impact on federal universal service funds from CETC designation

^{244.} *Id.* at 11,294; *see also id.* at 11,297 ("[A]t this time, the costs of adopting the Rural Task Force's proposal to freeze high-cost loop support... would significantly outweigh the potential benefits").

^{245.} Federal-State Joint Bd. on Universal Serv., 17 F.C.C.R. 22,642, 22,646 (2002).

^{246.} Id.

^{247.} Cellular S. License, Inc., 17 F.C.C.R. 24,393, 24,406 (2002); RCC Holdings, Inc., 17 F.C.C.R. 23,532, 23,545 (2002).

^{248.} MAG Plan Order, supra note 76, at 19,770 (separate statement of Martin, Com'r).

^{249.} Id.

^{250.} Adelstein, *supra* note 236.

decisions remains just that, the FCC's prevailing policy.²⁵¹ A state regulatory commission may or may not be sympathetic to these commissioners' sentiments, but like them state regulators must obey controlling federal law.

The Supreme Court of Utah has considered the impact of ETC designation on *state* universal service funds as a basis for upholding that state's public service commission's denial of ETC status to a competitive wireless carrier.²⁵² That decision supplies no persuasive support for considering the impact on the *federal* Universal Service Fund. The Utah court mistakenly assumed that its state's public utility regulators enjoyed unbounded discretion to construe the "public interest" standard established by the federal Telecommunications Act.²⁵³ Indeed, the court went so far as to upbraid the unsuccessful ETC petitioner for failing to "cite[] any authority which explicitly limits the factors the [Utah Public Service Commission] can consider in determining what is, or is not, in the public interest."254 As I have already demonstrated, the states must anchor their public interest analysis in the language, structure, and purposes of the Telecommunications Act of 1996. The Utah court's failure to recognize this principle undermined its decision. Even more objectionable, though, was the Utah court's assumption that "additional ETC designations" in rural markets "could be in the public interest" as long as "incumbent ETCs can reduce costs sufficiently such that" the designation of additional ETCs for rural markets would impose "no additional burdens ... on the State Fund."255 Such reasoning unacceptably conditions access to ETC status and with it, access to federal universal service funding on the fiscal health and well-being of incumbent carriers.

Simply as a matter of self-interest, it is hard to imagine why any state would deny ETC status to a carrier proposing to serve its rural markets and to clear the multiple regulatory hurdles needed to secure federal funding. The certifying state would receive the benefit of the subsidy, while any pressure on the universal service fund would be realized at a national level, where the state's share of the eventual financial burden would be relatively trivial. Under those assumptions, an unlawful preference for incumbent carriers seems more plausible than an altruistic concern for national fiscal responsibility as a state's motivation for refusing to designate additional ETCs in rural markets.

^{251.} *Cf.* U.S. R.R. Ret. Bd. v. Fritz, 449 U.S. 166, 176 n.10 (1980) ("The comments in the dissenting opinion about... the correct statement of the equal protection rational-basis standard... are just that: comments in a dissenting opinion.").

^{252.} See WWC Holding Co. v. Pub. Serv. Comm'n, 44 P.3d 714, 719-20 (Utah 2002).

^{253.} See id. at 719.

^{254.} Id.

^{255.} Id. (emphasis added).

Even mere contemplation of the financial impact on the USF as part of a decision to deny a competitive carrier's petition for ETC designation constitutes reversible error and grounds for preemption. The Telecommunications Act bans any "State or local regulation, or other State or local legal requirement, [that] prohibit[s] or ha[s] the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service."²⁵⁶ The Act specifically conditions "the ability of a State to impose . . . requirements necessary to preserve and advance universal service" on the state's compliance with the principle that such requirements be set forth and applied "on a competitively neutral basis."²⁵⁷ Congress has directed the FCC to "preempt the enforcement of [any] statute, regulation, or legal requirement" that violates the federal mandate to remove barriers to entry into local and interstate telecommunications markets.²⁵⁸

Preemption under section 253 "is virtually absolute and its purpose is clear — certain aspects of telecommunications regulation are uniquely the province of the federal government and Congress has narrowly circumscribed the role of state and local governments in this arena."²⁵⁹ Failure to satisfy even a single universal service principle, especially that of competitive neutrality, strips a state of any ability to seek shelter from preemption. Indeed, a state's failure to ensure competitive neutrality in its administration of the universal service program requires the FCC to preempt state law.²⁶⁰ Cognizant of the anticompetitive potential of intransigence by state commissions on ETC petitions by competitive carriers, the FCC has exercised its statutory powers under to preempt statelaw requirements that a carrier provide supported services throughout a service area before being designated as an ETC.²⁶¹

Even if a state could lawfully consider the financial sustainability of federal universal service mechanisms in response to an ETC designation petition — that is, even if such a discussion were not grounds for preemption — considerations of sound public policy would counsel deference by state regulatory commissions to the expertise and exclusive jurisdiction of the FCC. Plainly put, states are poorly suited to address the financial impact of ETC designations on the federal Universal Service Fund. Because federal support mechanisms are funded on a national basis,

^{256. 47} U.S.C. § 253(a) (2000). *See generally S.D. Preemption Order, supra* note 117, at 15,172-81 (analyzing federal preemption of anticompetitive regulations under state or local law).

^{257. 47} U.S.C. § 253(b) (2000).

^{258.} Id. § 253(d).

^{259.} City of Auburn v. Qwest Corp., 260 F.3d 1160, 1175 (9th Cir. 2001).

^{260.} See RT Communications, Inc. v. FCC, 201 F.3d 1264, 1269 (10th Cir. 2000); S.D. Preemption Order, supra note 117, at 15,176; Silver Star Tel. Co., 12 F.C.C.R. 15,639, 15,657 (1997).

^{261.} See S.D. Preemption Order, supra note 117, at 15,168.

this controversy does not turn on issues specific to any particular state. Rather, its resolution will hinge on issues that apply generally to all current and potential ETCs and to all consumers contributing to the federal fund by way of wireless and wireline phone use. These stakeholders' interests affect the entire country, and they deserve a coherent, national forum. If individual states were to consider the growth of the fund as part of public interest analysis, they would create a patchwork of standards for eligibility to receive federal universal service support. The most salient factor explaining state-to-state differences would be the varying extent to which incumbent carriers have captured state public utility regulators — perhaps the worst byproduct of decentralized decisionmaking. The result would create a stark and ultimately unlawful contrast with the uniform standard for contributions to the fund.²⁶²

At a minimum, the formation of any policy designed to curb allegedly excessive growth in the federal USF should and will take place at the federal level. The FCC's November 2002 order promises as much. In the meanwhile, states must not inject this factor into their analysis of the public interest in ETC designation proceedings. Until the FCC conclusively resolves this issue, any consideration by a state commission of the impact of CETC designations on the solvency of the federal Universal Service Fund would violate the Telecommunications Act.

In response to the November 2002 order, the Federal-State Joint Board on Universal Service has invited public comments concerning the process for designating ETCs and the methodology for calculating support in rural markets with more than one ETC.²⁶³ Diverse proposals for reform, ranging from the imposition of a moratorium on CETC designations to reconsideration of the embedded cost mechanisms and the derivation of "[per-line] portable universal service support for [all] ETCs" from "the support that the incumbent LEC would receive for the same line," now lie before the Joint Board.²⁶⁴ In the meanwhile, the FCC has announced its intention to "modify[] the [USF's] existing revenue-based methodology" so that "universal service contributions" will be "based on contributor-provided projections of collected end-user interstate and international telecommunications revenues, instead of historical gross-billed revenues."265

Although this interim step should "improve competitive neutrality among contributors" and may "sustain the universal service fund and

^{262.} See 47 U.S.C. § 254(b)(4) (2000) ("All providers of telecommunications services should make an equitable and nondiscriminatory contribution to the preservation and advancement of universal service.").

^{263.} See Comment on Certain of the Comm'n's Rules Relating to High-Cost Universal Serv. Support & the ETC Designation Process, 18 F.C.C.R. 1941 (2003).

^{264.} Federal-State Joint Bd. on Universal Serv., 17 F.C.C.R. 22,642, 22,245-46 (2002) [hereinafter *November 2002 Order*].

^{265.} Federal-State Joint Bd. on Universal Serv., 17 F.C.C.R. 24,952, 24,952 (2002).

increase the predictability of support in the near term," the FCC admits that this incremental step does not yet represent "more fundamental reform[]."266 The Commission has also directed the Joint Board to reconsider the FCC's current rules permitting high-cost support for all residential and business connections provided by ETCs, including second lines.²⁶⁷ Finally, as though to express its exasperation at the ideological distance between "parties [who]... argue[] that shortcomings in the current system hamper the emergence of competition in rural areas" and other parties who "have expressed concerns that universal service goals will be undermined if state commissions do not impose similar universal service obligations on incumbent LECs and competitive ETCs," the FCC has directed the Joint Board to reexamine the entire "system for resolving requests for ETC designations under section 214(e)(2) of the Act."268 The entire enterprise has dissolved into one of those intractable disputes where "[n]obody is happy and everybody has appealed."²⁶⁹

How, then, should the FCC and the Joint Board address the supposed problem of excessive growth in demands for high-cost support within the Universal Service Fund? I turn now to that question. Much of the reaction to this issue is based on a fundamental misunderstanding. The designation of multiple ETCs in rural high-cost areas is scarcely exerting financial pressure on the federal Universal Service Fund. Careful scrutiny reveals that CETC designations lag far behind other drivers of growth in the USF. Moreover, relative to incumbent ETCs, CETCs as a class receive a trivial share of federal support for telecommunications service in high-cost areas. The FCC should retain its current policy of excluding presumed financial pressure on the USF from the consideration of ETC designation petitions. Including that factor would fatally undermine the public interest in competitive neutrality and rural-urban parity.

2. The True Relevance of the Financial Factor

Any recommendation to freeze high-cost support levels within the USF must begin with a reconsideration of the FCC's most refusal to adopt such a proposal. In its 2001 *MAG Plan Order*, the FCC addressed the Rural Task Force's concern that "excessive growth in the fund" might occur "if incumbent carriers lose many lines to competitive eligible telecommunications carriers, or if competitive eligible telecommunications

352

^{266.} Id.

^{267.} See November 2002 Order, 17 F.C.C.R. at 22,646-47.

^{268.} Id. at 22,647.

^{269.} Tug Ocean Prince, Inc. v. United States, 584 F.2d 1151, 1153 (2d Cir. 1978); Empire Seafoods, Inc. v. Anderson, 398 F.2d 204, 207 (5th Cir. 1968).

carriers add a significant number of lines.^{"270} The Task Force had described CETC capture of lines previously served by an ILEC as a driver of growth in the fund:

[A]s an incumbent "loses" lines to a competitive eligible telecommunications carrier, the incumbent must recover its fixed costs from fewer lines, thus increasing its per-line costs. With higher per-line costs, the incumbent would receive greater per-line support, which would also be available to the competitive eligible telecommunications carrier for each of the lines that it serves.²⁷¹

The FCC, however, rejected the Task Force proposal to freeze highcost support levels. It characterized the likelihood that a CETC would "captur[e] a substantial percentage of lines from the incumbent" as "speculative."²⁷² Among the plan's "significant drawbacks," the Commission reasoned that freezing high-cost support would create "disincentives to infrastructure investment by rural carriers."²⁷³ The most compelling justification for the Commission's refusal to freeze high-cost support, however, lay in the ability of incumbent carriers to transform putative concern over the solvency of the fund into a legal bludgeon against competition. The *MAG Plan Order* recognized that a freeze in support could "hinder... competitive entry into rural study areas by creating an additional incentive for incumbents to oppose the designation of eligible telecommunications carriers."²⁷⁴

The FCC has given this argument far more credence than it deserves. The unbroken string of demands to freeze high-cost support within the USF launched during the prologue to the *First Report and Order* and never abandoned since represents a prime instance of the process by which diehard partisans try to turn even outrageous myth into history through relentless repetition. Portraying CETC designations as a one-way ratchet forcing growth in the federal Universal Service Fund has no basis in law or in fact. Even if a state commission could lawfully consider, in connection with its determination of the public interest under section 214(e)(2), the financial impact of ETC designations on the USF, a proper understanding of the underlying financial mechanism demonstrates that growth in the fund through competitive entry into rural markets is probably speculative and almost assuredly trivial. Worse, freezing the USF would contradict the

^{270.} MAG Plan Order, supra note 76, at 11,326.

^{271.} Id.

^{272.} Id.

^{273.} *Id.* at 11,294; *see also id.* at 11,297 ("at this time, the costs of adopting the Rural Task Force's proposal to freeze high-cost loop support . . . would significantly outweigh the potential benefits"); *id.* at 11,326 (expressing the Commission's concern that a freeze might "have had the unintended consequence of discouraging investment in rural infrastructure").

^{274.} Id. at 11,326.

principle of portability, which represents one of the most salutary, technology-forcing characteristics of the universal service program. The real driver of growth in the high-cost component of the USF is the FCC's continued use of an embedded-cost methodology for subsidizing incumbent rural carriers. As long as the Commission retains that methodology, no rule purporting to control USF growth by retarding the pace of CETC designations or curbing the total amount of high-cost support can be compatible with the public interest.

Proposals to freeze high-cost support abound, but honest statements of the fiscal impact of competitive entry on the Universal Service Fund are relatively rare. Accuracy in describing this real-life phenomenon varies inversely with the intensity with which interested parties advocate measures purportedly intended to remedy the supposed crisis in fund growth. High-cost support trails other sources of growth in the USF by a wide margin. According to data collected by the National Exchange Carrier Association, support programs for schools and libraries, rural health care, and interstate access have more than doubled the size of the USF since 1998.²⁷⁵ By contrast, the high-cost support and lifeline programs have increased by only 30 percent.²⁷⁶

Within the portion of the Universal Service Fund dedicated to highcost support, CETCs account for a trifling share. During the third quarter of 2002, competitive carriers received approximately \$14 million out of \$803 million in total high-cost support disbursed by the Fund.²⁷⁷ The resulting 1.8 percent share of total high-cost support is admittedly higher than the 0.4 percent share realized by CETCs during the first quarter of 2001 (when CETCs received approximately \$2 million out of \$638 million in high-cost support).²⁷⁸ The numerical imbalance between competitive versus incumbent ETCs is equally remarkable. Among approximately 1,400 ETCs in the United States, only 45 are competitive carriers.²⁷⁹ Within the subclass of CETCs, only 15 are mobile wireless providers; the remainder are competitive local exchange companies.²⁸⁰ In other words, a roll call of ETCs in the United States would report a class consisting of roughly 97 percent incumbent ETCs, 2 percent CETCs using wireline or

^{275.} See MICHAEL J. BALHOFF, THE RLEC MONITOR, VOLUME 6, at 8 (Winter 2003) (quarterly report published by Legg Mason Wood Walker, Inc., including regulatory commentary by the National Exchange Carrier Association).

^{276.} See id.

^{277.} See Fed.-State Joint Bd. on Universal Serv., 17 F.C.C.R. 22,642, 22,643-44 (2002); Comment on Certain of the Comm'n's Rules Relating to High-Cost Universal Serv. Support & the ETC Designation Process, 18 F.C.C.R. 1941, 1947 (2003) [hereinafter *Joint Bd. Pub. Notice*].

^{278.} See Federal-State Joint Bd. on Universal Serv., 17 F.C.C.R. 22,642, 22,244 (2002); Joint Bd. Pub. Notice, 18 F.C.C.R. at 1947.

^{279.} See Joint Bd. Pub. Notice, 18 F.C.C.R. at 1947.

^{280.} See id.

fixed wireless platforms, and 1 percent CETCs providing mobile wireless service.

Although the debate over subsidized rural telephony has somehow subordinated incumbent carriers' overwhelming share of the USF to the supposed contribution of competitive ETC designations to allegedly unsustainable growth in the fund, the truth remains that incumbent ETCs continue to receive more than 98 cents on the federal high-cost support dollar. Focusing on "empirical data" rather than protectionist rhetoric strongly "accentuate[s] the unfairness" of "impos[ing] a [potential] restraint on 100%" of competitive carriers in high-cost areas solely because of the ability of the earliest waves of entrants to capture 2 percent of federal universal funds dedicated to this segment of the market.²⁸¹ Meanwhile, cries of excessive growth and the accompanying demands for regulatory retribution issue forth from a class of carriers who outnumber their most dreaded competitors by nearly 100-to-1. The striking disparity between allegations of out-of-control growth and the modest magnitude of actual growth suggests that incumbent carriers and state regulators sympathetic to their cause are engaging in potentially anticompetitive manipulation of the rules governing ETC designation and universal service financing.

Moreover, not all growth within the USF is equally worrisome from a public policy perspective. Growth attributable to economic development in rural areas and to increased consumer demand for telecommunications and advanced services is hardly objectionable. If anything, this sort of growth indicates that universal service is achieving one of its goals, that of extending equality of economic opportunity from America's cities into the nation's countryside. By contrast, USF growth driven by the rising average costs of delivering telecommunications service over a wireline network may reflect the needless diversion of public money to sustaining obsolete facilities. In other words, support paid to wireless carriers tends to contribute to benign or even desirable growth in the USF. By contrast, to the extent that a larger amount of universal service financing is being disbursed to cover rising average costs incurred by incumbent ETCs, such growth may give rise to legitimate policy concerns. Blame for such deleterious growth, however, cannot be fairly laid at the feet of competitive wireless entrants into high-cost markets. Again, incumbent carriers' calls to control growth in federal universal service obligations take no account of these subtleties, which upon closer examination provide no support for fearing (let alone curbing) wireless entry.

Any freeze in high-cost support would eviscerate a fundamental principle of universal service under the Telecommunications Act: portability. The FCC's rules contemplate that CETC capture of customers

^{281.} Craig v. Boren, 429 U.S. 190, 213-14 (1976) (Stevens, J., concurring).

[Vol. 2

from an ILEC should trigger a concomitant transfer of universal service support from the ILEC to the CETC: "A competitive eligible telecommunications carrier shall receive universal service support *to the extent that the competitive eligible telecommunications carrier captures the subscriber lines of an incumbent local exchange carrier*... or serves new subscriber lines in the incumbent LEC's service area."²⁸² This regulation renders "the universal service subsidy [] portable so that it moves with the consumer, rather than stay with the incumbent LEC, whenever a customer makes the decision to switch local service providers."²⁸³ The regulatory virtue of portability should not be transmogrified through legal misinterpretation into a fiscal vice that purportedly menaces the liquidity of the federal universal service support fund.

Proponents of a support freeze are correct in one respect: wireless entrants are capturing subscribers from wireline incumbents. The FCC has the increased profile of wireless recognized carriers in the telecommunications market.284 Wireless-for-wireline substitution is quickening its pace. In its most recent study of the phenomenon, the FCC acknowledged "growing evidence that consumers are substituting wireless service for traditional wireline communications."285 The FCC cited one study estimating "that, by the end of 2001, wireless had displaced 10 million access lines."286 Another study cited by the FCC "estimates that 2 million households replaced an access line with a wireless phone in the first six months of 2001" alone.²⁸⁷ "[A]s of November 2001, 1.2 percent of households in the United States indicated that they had only wireless phones."288 True to the grander "purpose[s] of universal service," portability of support within the federal universal service program "benefit[s] the customer, not the carrier."289

To treat wireless-for-wireline substitution as a threat to the solvency of the Universal Service Fund and therefore as a public interest consideration *against* competitive entry would turn deregulation on its head. Under no

^{282. 47} C.F.R. § 54.307(a) (2002) (emphasis added).

^{283.} Alenco Communications, Inc. v. FCC, 201 F.3d 608, 621 (5th Cir. 2000).

^{284.} See Annual Report & Analysis of Competitive Market Conditions with Respect to Commercial Mobile Servs., 16 F.C.C.R. 13,350, 13,438 & n.24 (2001); Annual Report & Analysis of Competitive Market Conditions with Respect to Commercial Mobile Servs., 15 F.C.C.R. 17,660, 17,788 & n.20 (2000).

^{285.} Annual Report & Analysis of Competitive Market Conditions with Respect to Commercial Mobile Servs., 17 F.C.C.R. 12,985, 13,017 (2002) [hereinafter *Seventh CMRS Report*]; *accord* Verizon Wireless's Petition for Partial Forbearance, 17 F.C.C.R. 14,972, 14,979 (2002).

^{286.} Seventh CMRS Report, 17 F.C.C.R. at 13,017.

^{287.} Id. at 13,017 n.214.

^{288.} Comment on Certain of the Comm'n's Rules Relating to High-Cost Universal Serv. Support & the ETC Designation Process, 18 F.C.C.R. 1941, 1948 (2003).

^{289.} Alenco Communications, Inc. v. FCC, 201 F.3d 608, 621 (5th Cir. 2000); accord MAG Plan Order, supra note 76, at 11,257-58.

circumstances should the cost-effectiveness of a prospective ETC's service offerings should be counted as a *negative* in the applicable public interest analysis. The FCC has observed, squarely to the contrary, that a competitive ETC's ability to extend service to a remote area at low cost should be considered a strong contribution to the public interest:

[T]o the extent that a competitive eligible telecommunications carrier offering an alternative to wireline technology can extend service to a remote . . . area at a substantially lower cost than a wireline carrier, we believe that it is a more economically efficient use of federal universal service funds to create incentives, in the first instance, for the lower-cost provider to provide the service.²⁹⁰

The FCC has found "no merit to the contention that designation of an additional ETC in areas served by rural telephone companies will necessarily create incentives to reduce investment in infrastructure, raise rates, or reduce service quality to consumers."²⁹¹ "To the contrary," the FCC has reasoned, "competition may provide incentives to the incumbent to implement new operating efficiencies, lower prices, and offer better service."²⁹²

3. Proposed Solutions

The FCC has already adopted the proper approach to controlling the USF growth that presumably stems from the CETC designation process. The FCC should retain its current approach of conducting proceedings designed to review a single ETC petition for a specific market without regard to concerns over allegedly excessive growth in the high-cost component of the Universal Service Fund. On the other hand, if excessive growth in the demand for high-cost support within the USF is considered a valid query within the public interest analysis required by section 214(e)(2) and (6), the FCC should address that purported problem in a fashion that is consistent with the public interest and the grander procompetitive purposes of the 1996 Act.

The legal solution to this predicament lies in breaking the fatal combination of an embedded-cost methodology with the consideration of fiscal pressure on the USF as an element of the public interest. The simplest expedient lies in retaining the FCC's current policy and confirming what sound principles of statutory interpretation already dictate: refusal to consider the financial impact of ETC designations on the high-

^{290.} In reW. Wireless Corp., 15 F.C.C.R. 12,208, 12,241 (2000).

^{291.} In re W. Wireless Corp., 16 F.C.C.R. 48, 57 (2000).

^{292.} Id.

cost component of the Universal Service Fund. In the long run, however, the FCC cannot continue to defer what it has promised since 1997 but has never delivered: computing incumbent carriers' support for delivering service to high-cost areas strictly according to forward-looking costs. The legitimate public interest considerations of competitive neutrality, technological evolution, and consumer choice dictate no less.

The real source of the problem is not competitive entry, but rather the continued use of an embedded cost methodology for computing high-cost support to incumbent carriers in rural areas. The FCC's ongoing policy of basing high-cost support to all ETCs in rural areas on the incumbent ETC's embedded costs serves as the primary driver of entry-related growth in the high-cost component of the USF. In designing every other aspect of the federal universal service program, "the FCC decided to use the 'forward-looking' costs... of a carrier."293 This commitment to a regulatory methodology based "on the costs an efficient carrier would incur (rather than the costs the incumbent carriers historically have incurred)" supplies a powerful tool for "encourag[ing] carriers to act efficiently."²⁹⁴ A regulatory strategy with any pretense to economic efficiency must focus prospectively on costs to the exclusion of embedded costs.²⁹⁵ Because the "historical investments" in legacy networks are "sunk costs" and have no relevance to contemporary business decisions, prices in a competitive market react solely "to current costs."296 The need to ignore historic costs in making "current pricing decisions," whether through pure market-based competition or regulatory mechanisms designed to remedy competitive imperfections, is "particularly significant in industries such as telecommunications which depend heavily on technological innovation."297

With respect to the delivery of universal service support for high-cost areas, the law falls far short of economic ideals. In its *First Report & Order*, the FCC adopted a methodology using embedded cost in favor of "a cost model or other means of determining forward-looking economic cost . . . to calculate . . . support" to carriers "serving rural high cost areas."²⁹⁸ At that time, the Commission acknowledged "that calculating high cost

^{293.} Tex. Office of Pub. Util. Counsel v. FCC, 183 F.3d 393, 407 (5th Cir. 1999).

^{294.} Id.

^{295.} See DALE LEHMAN & DENNIS WEISMAN, THE TELECOMMUNICATIONS ACT OF 1996: THE "COSTS" OF MANAGED COMPETITION 66 (2000).

^{296.} Alenco Communications, Inc. v. FCC, 201 F.3d 608, 615 (5th Cir. 2000); see also ROBERT S. PINDYCK & DANIEL L. RUBINFELD, MICROECONOMICS § 7.1, at 199 (2d ed. 1992) (observing that sunk costs "are usually visible," but arguing nevertheless that "they should always be ignored when making economic decisions"); RICHARD A. POSNER, ECONOMIC ANALYSIS OF LAW § 1.1, at 7 (3d ed. 1986) (observing that "cost to an economist is a forward-looking concept" and that costs already incurred "do not affect decisions on price and quantity").

^{297.} MCI Communications Corp. v. Am. Tel. & Tel. Corp., 708 F.2d 1081, 1116-17 (7th Cir. 1983).

^{298.} First Report & Order, supra note 65, at 8934.

support based on embedded cost is contrary to sound economic policy."²⁹⁹ The FCC "conclude[d] that the 1996 Act's mandate to foster competition in the provision of telecommunications services in all areas of the country and the principle of competitive neutrality" would eventually "compel" the Commission "to implement support mechanisms that will send accurate market signals to competitors."³⁰⁰

The FCC originally anticipated "that forward-looking support mechanisms that could be used for rural carriers . . . will be developed within three years" of the 1997 release of the *First Report & Order*.³⁰¹ The long awaited transition to a forward-looking methodology for computing high-cost support to rural carriers, however, has not yet occurred. Despite frequently reciting its intention to wean rural ILECs off of an embedded cost methodology and to align this system with the forward-looking cost methodology that governs nonrural carriers, the FCC has not yet implemented this strategy.³⁰² Under current FCC rules, that methodology will remain in place until 2006.³⁰³

The embedded cost methodology acts as a far more effective driver of growth in the USF than does competitive entry.³⁰⁴ Ever since the *First Report and Order*, the Joint Board and the FCC have consistently recognized how the current funding method is wedded to incumbent ETC costs.³⁰⁵ Worse, continued reliance on embedded costs increases the cost of universal service in a most deleterious fashion. It drives USF growth upward in order to compensate incumbent carriers whose average costs are rising in lock-step with their loss of market position to their competitors. The potential of this approach to divert precious public funds toward sustaining obsolete physical plant and to discourage the deployment of more efficient technology may be the gravest source of inefficiency within the universal service program.

A forward-looking mechanism is neither alien to the FCC's experience with universal service administration nor theoretically unattainable. A forward-looking mechanism is precisely what the FCC has adopted for calculating and distributing high-cost support to nonrural carriers.³⁰⁶ In the rural context, Chairman Michael K. Powell has

^{299.} Id. at 8935.

^{300.} Id.

^{301.} Id. at 8936.

^{302.} See MAG Plan Order, supra note 76, at 11,259; Federal-State Joint Bd. on Universal Serv., 14 F.C.C.R. 20,432, 20,439 (1999), aff'd in part & rev'd in part sub nom. Qwest Corp. v. FCC, 258 F.3d 1191 (10th Cir. 2001); First Report & Order, supra note 65, at 8899, 8936.

^{303.} See MAG Plan Order, supra note 76, at 11,258-29.

^{304.} See id. at 11,360 (separate statement of Powell, Chairman).

^{305.} Compare First Report & Order, supra note 65, at 8932-34, 8944-45 with Comment on Certain of the Comm'n's Rules Relating to High-Cost Universal Serv. Support & the ETC Designation Process, 18 F.C.C.R. 1941, 1948 (2003).

^{306.} See 47 C.F.R. § 54.309 (2002).

advocated "a permanent support mechanism, based on forward-looking costs," or at any rate a "measure of costs" more appropriate than incumbent carriers' per-line embedded costs, that would more effectively "ensure that the rural high-cost loop fund grows no larger than is truly necessary to accomplish its purpose."³⁰⁷ If proponents of a moratorium on CETC designations were truly concerned about relieving financial pressure on the USF, as opposed to using regulatory process to fend off competitive challenges to incumbent carriers, they would advocate an immediate conversion to a funding formula that uses forward-looking costs and promotes full portability of USF support.

One final look at the Telecommunications Act confirms the regulatory imprudence and legal impossibility of treating financial pressure on the USF as a component of the public interest. Indulging this favorite argument of incumbent rural telephone companies would unleash a lethal combination of current regulatory policy with the economic characteristics of a wireline telecommunications network. Under current legal and economic conditions, incumbent wireline carriers hold the first ETC designation in virtually every rural area. The calculation of support according to these incumbents' embedded cost guarantees that every additional ETC designation in an overlapping market will increase the financial demands on the Universal Service Fund, even if only by a trivial amount. As long as the FCC retains its embedded-cost methodology for computing high-cost support to rural IETCs, allowing allegations of excessive fiscal pressure on the USF to influence interpretations of the term "public interest" would logically foreclose further ETC designations whenever a competitive carrier would capture at least some lines previously served by the incumbent.

Imposing a *de facto* moratorium on competitive ETC designations would destroy the 1996 Act's agenda for preserving and advancing universal service. Treating financial pressure on the USF without regard to its magnitude, its policy implications, or its origins in regulatory decisions made consciously for the benefit of incumbent carriers as a factor against competitive entry is inimical to every other element of the public interest. As a matter of statutory interpretation, federal universal service policy cannot simultaneously retain an embedded-cost methodology for computing high-cost support to incumbent rural carriers while interpreting the term "public interest" (within the meaning of section 214(e)(2) and (6)) to prohibit ETC designations that increase financial demands on the Universal Service Fund. As long as the embedded-cost mechanism remains in force, the designation of a competitive ETC forces some growth in the

^{307.} MAG Plan Order, supra note 76, at 11,360 (separate statement of Powell, Chairman).

USF as soon as the entrant captures at least one line previously served by the incumbent.

Any reading of section 214(e)(2) and (6) in which the presumed financial impact of additional ETC designations is deemed to be detrimental to the public interest will lead to an absurd result. Under any legal interpretation of the term "public interest" in which the supposed pressure of additional ETC designations on the high-cost component of the federal Universal Service Fund constitutes a serious public cost, categorically *no* ETC petitions beyond those confirming the eligibility of an incumbent rural telephone company can ever be approved. An interpretation of the term "public interest" that forecloses all ETC designations beyond those confirming the status of the incumbent carrier as a rural community's first and only eligible telecommunications carrier simply cannot be correct.

Shutting off all high-cost funding for competitive carriers in rural areas would devastate the public interest foundations of federal universal service policy: competitive neutrality, rural-urban parity, and portability of support. Such a catastrophic interpretation of the Telecommunications Act and its "public interest" standard stems from a seemingly innocuous combination: a regulatory policy to postpone the implementation of a forward-looking financing methodology, coupled with wireline-to-wireless migration in a competitive and consumer-driven marketplace. As long as there is some wireless-to-wireline migration, which is inevitable in a competitive, consumer-driven, and technologically volatile marketplace, there are no realistic circumstances under which a competitive carrier can successfully secure designated as an ETC. That the prevalence of wirelineto-wireless migration the epitome of competition and technological evolution could affirmatively undermine a wireless carrier's quest for ETC status conclusively establishes the perniciousness and ultimate illegality of this approach.

At an absolute minimum, the FCC should retain its current approach of excluding concerns over fund growth from proceedings designed to designate an ETC for a specific market. On the other hand, the Joint Board has begun proceedings to address incumbent carriers' longstanding demands for tangible measures designed to curb growth in the high-cost component of the USF. It may be politically impossible for the FCC to take no action whatsoever. Any measure the FCC ultimately adopts must remain faithful to countervailing universal service principles such as competitive neutrality, rural-urban parity, and portability of support. Even if high-cost support is in fact exerting unsustainable pressure on the Universal Service Fund, and even if a desire to limit such growth may lawfully be considered a component of the public interest, the FCC must not cap high-cost funding or adopt other policies that may retard

competitive entry into rural markets. Nor should the Commission amend its rules to vary support according to an ETC's technological platform or to cap the amount of high-cost support available to CETCs. To the extent that the FCC wishes to change its existing rules, it should consider instead the possibility of basing high-cost support, on a competitively neutral basis, upon the costs of a lowest-cost provider of supported telecommunications services to a rural market.

If anything, the pending Joint Board proceeding and the FCC's response to the Board's eventual recommendations will enable the FCC to address the real root of the problem. Because Commission's continued adherence to an embedded-cost mechanism is the principal driver of growth in the USF's high-cost support obligations, the FCC should adopt a forward-looking methodology for computing universal service support in high-cost areas, wholly decoupled from incumbent carriers' costs. Such a methodology has been contemplated, but never implemented, since the inception of the 1996 Act's universal service program. The FCC should amend its rules to apply the same forward-looking methodology for computing high-cost support to IETCs in rural and nonrural service areas alike.

IV. PREEMPTING STATE REGULATION OF WIRELESS TELEPHONY

A significant number of controversies over universal service support for rural telephony involve a pitched technological conflict: incumbents' legacy wireline networks versus the wireless platforms favored by many aspiring CETCs. State regulators' natural propensity to favor incumbents and their technological platforms demands attention to a special provision of federal law that targets this precise problem. Section 332 of the Communications Act, as amended, provides that "no State or local government shall have any authority to regulate the entry of or the rates charged by any commercial mobile service or any private mobile service."308 Congress adopted this preemptive measure as part of the Omnibus Budget Reconciliation Act of 1993³⁰⁹ in order "to promote rapid deployment of a wireless telecommunications infrastructure."310 By their nature, wireless communications markets transcend not only state boundaries but also the geographic footprints of legacy wireline communications networks.³¹¹ "The plain language of this legislation manifests a clear Congressional intent to

^{308. 47} U.S.C. § 332(c)(3)(A) (2000).

^{309.} Pub. L. No. 103-66, § 6002(b)(2)(A), 107 Stat. 312, 393 (1993).

^{310.} Rates of Wholesale Cellular Serv. Providers in Conn., 10 F.C.C.R. 7025, 7025 (1995), *review denied sub nom.* Conn. Dep't of Pub. Util. Control v. FCC, 78 F.3d 842 (2d Cir. 1996).

^{311.} See Ball v. GTE Mobilnet, 81 Cal. App. 4th 529, 534, 96 Cal. Rptr. 2d 801, 804 (2000); H.R. REP. NO. 103-111, at 260 (1993), reprinted in 1993 U.S.C.C.A.N. 378, 587.

preempt the field" of wireless telecommunications regulation "with respect to rates and market entry."³¹²

The 1993 amendment imposed "regulatory symmetry" along technological lines rather than jurisdictional distinctions based on interversus intrastate carriage or commercial versus private service.³¹³ Congress sought to "promote investment in . . . wireless infrastructure by preventing burdensome and unnecessary state regulatory practices."³¹⁴ Preemption under section 332 takes special aim at two of the likeliest obstacles to rapid rollout of wireless services: (1) the anticompetitive advantages inherent in incumbent local exchange carriers' ownership of the physical communications networks³¹⁵ and (2) anticompetitive regulatory intervention by state and local officials.³¹⁶

The broad, preemptive provision of section 332 triggers a cascade of interrelated statutory definitions. Federal law defines "commercial mobile service" as "any mobile service . . . that is provided for profit and makes interconnected service available (A) to the public or (B) to such classes of eligible users as to be effectively available to a substantial portion of the public."³¹⁷ "Private mobile service" refers merely to that class of "mobile service . . . that is not a commercial mobile service or the functional equivalent of a commercial mobile service."³¹⁸ For its part, "mobile service" is defined as "a radio communication service carried on between mobile stations or receivers and land stations, and by mobile stations communicating among themselves."³¹⁹ In turn, "[t]he term 'mobile station' means a radio-communication capable of being moved and which ordinarily does move."³²⁰

Section 332 raises a formidable barrier to state-law regulation of entry by commercial mobile radio service (CMRS) providers and of the rates they charge. First, strictly as a matter of statutory language, the mobility of each individual communication unit is not essential to the definition of "mobile service." The definition of mobile service includes, without regard to the involvement of "mobile stations," "any service for which a license is required

^{312.} Bryceland v. AT&T Corp., 122 F. Supp. 2d 703, 707 (N.D. Tex. 2000).

^{313.} See Conn. Dep't of Pub. Util. Control v. FCC, 78 F.3d 842, 846 (2d Cir. 1996).

^{314.} Implementation of Sections 3(n) & 332 of the Communications Act Regulatory Treatment of Mobile Servs., 9 F.C.C.R. 1411, 1421 (1994), *reconsideration dismissed in part and denied in part*, 15 F.C.C.R. 5231 (2000); *accord* Tenore v. AT&T Wireless Servs., 136 Wash. 2d 322, 335-36, 962 P.2d 104, 110 (1998).

^{315.} See U.S. West Communications, Inc. v. Wash. Utils. & Transp. Comm'n, 255 F.3d 990, 992 (9th Cir. 2001).

^{316.} See, e.g., Sprint Spectrum L.P. v. Town of Easton, 982 F. Supp. 47, 49-50 (D. Mass. 1997).

^{317. 47} U.S.C. § 332(d)(1) (2000); see also 47 C.F.R. § 20.3 (2002).

^{318. 47} U.S.C. § 332(d)(3) (2000).

^{319.} Id. § 153(27).

^{320.} Id. § 153(28).

in a personal communications service established pursuant to the proceeding entitled 'Amendment to the Commission's Rules to Establish New Personal Communications Services' (GEN Docket No. 90-314; ET Docket No. 92-100), or any successor proceeding."321 Nor is it clear that actual motion is a sine qua non of the definition of "mobile station," for the FCC's definition simply describes "mobile station" as "[o]ne or more transmitters that are capable of operation while in motion."322 In addition, the relevant legislative history suggests that Congress did not intend to exclude fixed wireless service from the statutory definition of mobile service. The original Senate bill in what ultimately became the Omnibus Budget Reconciliation Act of 1993 expressly excluded fixed wireless service from the definition of mobile service. The House-Senate Conference, however, adopted the House of Representatives' definition of mobile service, which did not expressly exclude fixed wireless service.³²³ When Congress "specifically consider[s] and reject[s]" a legislative proposal, as it did during the debates over the 1993 amendment, that act of legislative rejection provides one of the "clear[est] indication[s] of congressional agreement" with the opposite legal proposition.³²⁴

Finally, the FCC has recognized that a service need not be "mobile" in a narrow sense in order to be regulated as commercial mobile radio service. The FCC has expressly stated that fixed services provided by a CMRS carrier on an auxiliary, ancillary, or incidental basis are regulated as CMRS.³²⁵ Seeking "to offer some flexibility to licensees providing CMRS services," the FCC has "consistently stated" that its approach to CMRS regulation would enable wireless carriers to "offer[] a broad array of services,

^{321.} *Id.* § 153(27); *see also* GTE Mobilnet v. Johnson, 111 F.3d 469, 472 (6th Cir.1997) (including "cellular telephone service" within § 153(27)'s definition of "mobile service"); Gilmore v. Southwestern Bell Mobile Sys., Inc., 156 F. Supp. 2d 916, 920 n.3 (N.D. Ill. 2001) (same).

^{322. 47} C.F.R. § 22.99 (2002).

^{323.} See H.R. CONF. REP. NO. 103-213, at 497 (1993).

^{324.} Runyon v. McCrary, 427 U.S. 160, 174-75 (1976); *see also* INS v. Cardoza-Fonseca, 480 U.S. 421, 442-43 (1987) ("Few principles of statutory construction are more compelling than the proposition that Congress does not intend *sub silentio* to enact statutory language that it has earlier discarded in favor of other language." (quoting Nachman Corp. v. Pension Benefit Guar. Corp., 446 U.S. 359, 392-93 (1980) (Stewart, J., dissenting))); NLRB v. Catholic Bishop, 440 U.S. 490, 511 (1979) (Brennan, J., dissenting) (arguing that a court commits "a particularly transparent violation of the judicial role" when it fails to acknowledge how "Congress itself considered and rejected a[n]... amendment" similar to the court's interpretation of a statute).

^{325.} See 47 C.F.R. § 22.323 (2002); Petition for a Declaratory Ruling that the Basic Universal Serv. Offering Provided by W. Wireless in Kan. is Subject to Regulation as Local Exch. Serv. [hereinafter Kan. Preemption Order], 17 F.C.C.R. 14,802, 14,817 (2002); Amendment of the Commission's Rules to Permit Flexible Serv. Offerings in the Commercial Mobile Radio Serv., 15 F.C.C.R. 14,680, 14,685 (2000); Amendment of the Commission's Rules to Permit Flexible Serv. Offerings in the Commercial Mobile Radio Serv., 15 F.C.C.R. 14,680, 14,685 (2000); Amendment of the Commission's Rules to Permit Flexible Serv. Offerings in the Commercial Mobile Radio Serv., 11 F.C.C.R. 8965, 8968-69 (1996) [hereinafter First CMRS Flex Order]; Implementation of Sections 3(n) & 332 of the Communications Act Regulatory Treatment of Mobile Servs., 9 F.C.C.R. 1411, 1424 (1994), reconsideration dismissed in part and denied in part, 15 F.C.C.R. 5231 (2000).

including services that could potentially extend, replace, and compete with wireline local exchange service."³²⁶ Whether a specific "radiocommunication station" actually "moves" is immaterial.³²⁷ Within its regulatory framework for CMRS, the FCC has elected to "includ[e] 'wireless local loop,' [which] may be delivered using a system architecture *that is mobile or fixed, or that combines mobile and fixed components.*"³²⁸ By operation of section 332, fixed wireless service that is regulated by the FCC as CMRS lies beyond the reach of state regulators.

Fairly read, part 22 of the FCC's regulations and the FCC's orders facilitating flexible use extend the federal regulatory structure for CMRS to all forms of radio communication, whether mobile or fixed, that share facilities used by a CMRS licensee at least in part to provide mobile services. In the *Kansas Preemption Order*, which arose in response to a dispute over the regulatory status of basic universal service offered over a wireless platform, the FCC reasoned that service "provided over the same spectrum and infrastructure that [a CMRS licensee] uses to provide conventional mobile cellular service, and is in all respects the same as conventional mobile cellular service" qualifies as incidental CMRS service, without regard to "customer equipment."³²⁹ If a petitioner for CETC designation provides both fixed wireless and conventional mobile services on shared infrastructure, that fact should suffice to trigger section 332 and its preemptive effect on state laws that directly or indirectly affect either rates or entry among wireless carriers.

Since rendering the *Kansas Preemption Order*, the FCC has eliminated section 22.323 of its rules pursuant to a mandatory biennial review of its rules.³³⁰ The *Kansas Preemption Order*, however, recognized that elimination of section 22.323 would nevertheless leave "the criteria specified in [that] rule... relevant to [the] evaluation of whether [a fixed wireless] service is properly classified as incidental."³³¹ The streamlining of the FCC's rules therefore has no impact on the legal classification of Petitioners' fixed wireless service offerings as auxiliary, ancillary, or incidental CMRS.

The North Dakota Supreme Court has also addressed this issue. In *Consolidated Telephone Co-operative v. Western Wireless Corp.*,³³² an incumbent local exchange company refused interconnection with a

^{326.} First CMRS Flex Order, 11 F.C.C.R. at 8969.

^{327. 47} U.S.C. § 153(28) (2000).

^{328.} First CMRS Flex Order, 11 F.C.C.R. at 8969 (emphasis added).

^{329.} Kan. Preemption Order, 17 F.C.C.R. at 14,817.

^{330.} See Public Mobile Servs. & Personal Communications Servs., 67 Fed. Reg. 77,175, 77,191 (Dec. 17, 2002) (removing 47 C.F.R. § 22.323, effective Feb. 18, 2003).

^{331. 17} F.C.C.R. at 14,817 n.108.

^{332. 637} N.W.2d 699 (N.D. 2001).

competitor offering wireless residential service.³³³ The ILEC defended its action by arguing that its competitor could not lawfully serve residents without a certificate of public convenience and necessity issued by the North Dakota Public Service Commission.³³⁴ The PSC disagreed, reasoning that the wireless competitor was providing commercial mobile radio service and therefore lay beyond the reach of public utility regulation under North Dakota law.³³⁵

On appeal, the ILEC "argued [that] the 'tellular' device" used by the wireless carrier's customers was "not CMRS under the federal statutory definition because it ordinarily does not move and was not intended for mobile use."336 Acknowledging the FCC's numerous, repeated declarations that "telecommunications services provided through dual-use equipment ... having both fixed and mobile capabilities fall within the statutory definition of 'mobile service' under the Communications Act,"337 the North Dakota Supreme Court declared itself powerless "to declare invalid, or simply to ignore," the FCC's conclusive interpretation of federal law.³³⁸ The North Dakota decision in *Consolidated Telephone* is in complete accord with extensive federal precedent barring state regulatory commissions, state courts, and even federal district courts from reinterpreting, challenging, or otherwise waging "collateral attacks" on FCC regulations and orders.339

Indeed, a tellular unit of the sort at issue in *Consolidated Telephone* would probably satisfy the definition of mobile service by any standard. In the *Kansas Preemption Order*, the FCC ruled that "BUS [basic universal service] terminal equipment 'ordinarily does move,' consistent with the second prong of the definition of mobile station."³⁴⁰ The FCC specifically "reject[ed] the . . . argument that meeting the second prong of the statutory test requires an affirmative showing that customers usually or typically use the wireless unit while mobile."³⁴¹ Refusing to adopt a regulatory approach so dependent upon "the subjective and varying behavior of particular

340. Kan. Preemption Order, 17 F.C.C.R. at 14,811-12 (citing 47 U.S.C. § 153(28)).
341. Id. at 14,812.

^{333.} See id. at 701.

^{334.} See id.

^{335.} See id.

^{336.} Id. at 706.

^{337.} Id. at 709.

^{338.} Id. at 707.

^{339.} See, e.g., United States v. Neset, 235 F.3d 415, 420-21 (8th Cir. 2000); U.S. West Communications, Inc. v. Hamilton, 224 F.3d 1049, 1055 (9th Cir. 2000); In re FCC, 217 F.3d 125, 139 (2d Cir. 2000); United States v. Any & All Radio Station Transmission Equip., 207 F.3d 458, 463 (8th Cir. 2000); Southwestern Bell Tel. Co. v. Ark. Pub. Serv. Comm'n, 738 F.2d 901, 906-07 (8th Cir. 1984), vacated and remanded on other grounds, 476 U.S. 1167 (1986); see also FCC v. ITT World Communications, Inc., 466 U.S. 463, 468 (1984) (acknowledging the exclusive jurisdiction of the federal courts of appeals to review the declaratory rulings, policies, practices, and regulations of the FCC).

customers" as to be "unworkable," the FCC concluded instead that "the statutory test is met if mobile operation is an inherent part of the service offering that is reasonably likely and not an extraordinary or aberrational use of the equipment."³⁴²

The wireless access unit at issue in the Kansas Preemption Order could "be 'picked up, placed in a car, rolled down the road and taken to the barn."343 That unit was "specifically designed to operate while in motion with the same seamless hand-off capability as any other cellular phone."344 Quite typically, a wireless calling plan specifically allows a customer to use the unit anywhere within a local calling area that is roughly equivalent to a rural school district and that includes, in most instances, several rural communities. Moreover, a tellular unit can typically be used with any of a wireless carrier's rate plans, which enables any customer to elect a roaming option. The Kansas Preemption Order treated the existence of a wireless carrier's "express provision for mobility [within a local service area] and roaming in the terms of service" as strong evidentiary support for the proposition that the calling unit provided by the carrier "ordinarily does move."345 The Kansas Preemption Order thus eviscerates purported efforts to distinguish a wireless carrier's basic universal service offering from "traditional" cellular offerings.

Section 332's reach should not be underestimated. The scope of preemption under section 332 is not limited to direct regulation of a carrier's rate of return. Instead, section 332 also preempts any action that has the "effect" of regulating the rates charged by a CMRS carrier.³⁴⁶ State action is unlawful if it would "necessarily force [a CMRS carrier] to do more than required by the FCC."³⁴⁷ Federal law "specifically insulates . . . FCC decisions" affecting CMRS carriers including the conscious federal policy of leaving CMRS rates to market forces instead of regulation from interference under state law.

Any state-law requirement that CMRS providers file a tariff as a condition of ETC designation constitutes rate regulation in blatant violation of section 332. A state commission cannot deflect this provision's preemptive effect by describing the tariff as one ostensibly filed solely for "disclosure purposes." Any tariffing requirement opens the door to the very type of state regulation of CMRS providers that federal law forbids. "The tariff-filing requirement is . . .the heart of the common-carrier section of

^{342.} Id. at 14,813.

^{343.} Id. at 14,811.

^{344.} Id. at 14,812.

^{345.} *Id.* (observing further that the terms of Western Wireless's basic universal service offering entitle customers to "unlimited use within Western Wireless' local service area as well as roaming on Western Wireless' system outside the local service area").

^{346.} Bastien v. AT&T Wireless Servs., Inc., 205 F.3d 983, 989 (7th Cir. 2000).

^{347.} Id.

the Communications Act... [R]ate filing [has historically been] Congress's chosen means of preventing unreasonableness and discrimination in charges³⁴⁸

If forced to file a tariff, a prospective CETC would be bound by its terms. The carrier would be barred from negotiating terms that deviate from those contained in the tariff. Moreover, even if the carrier could change its rates by filing a revised tariff with the state commission, the commission's ability to revoke ETC designation based on the tariffed rates violates section 332.349 A state commission would act just as unlawfully if it conditioned Universal Service Fund eligibility on other terms and conditions of service contained in a tariff filed by a carrier seeking ETC status. Any "claim for inadequate services" raised by state regulators under color of patrolling a wireless carrier's "disclosure-only" tariff necessarily violates section 332, since "[a]ny claim for excessive rates can be couched as a claim for inadequate services and vice versa."350 Rates, which "do not exist in isolation" from services, "have meaning only when one knows the services to which they are attached."³⁵¹ In sum, section 332's prohibition of state regulation of rates and entry by CMRS providers is broad enough to preempt not only direct ratemaking by a state, but also all other actions under color of state law that "raise the issue of whether [a customer] receive[s] sufficient services in return for the" rates charged by a CMRS provider.352

Section 332 works in concert with the general preemption provisions of the Telecommunications Act. Section 253 of the Communications Act, added by the 1996 amendments, generally preempts any "State or local statute or regulation, or other State or local legal requirement," that "prohibit[s] or ha[s] the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service."³⁵³ The Act's preemption provision, however, contains a savings clause that safeguards "the ability of a State to impose, on a competitively neutral basis and consistent with section 254..., requirements necessary to preserve and

^{348.} MCI Telecomms. Corp. v. Am. Tel. & Tel. Co., 512 U.S. 218, 229 (1994); *accord* Am. Tel. & Tel. Co. v. Cent. Off. Tel., Inc., 524 U.S. 214, 223 (1998); *see also* Maislin Indus., U.S., Inc. v. Primary Steel, Inc., 497 U.S. 116, 126 (1990) ("The duty to file rates... and the obligation to charge only those rates have always been considered essential to preventing price discrimination and stabilizing rates." (citation omitted)).

^{349.} See Cent. Office, 524 U.S. at 228; Bastien, 205 F.3d at 989.

^{350.} *Cent. Office*, 524 U.S. at 223; *accord Bastien*, 205 F.3d at 988; Bryceland v. AT&T Corp., 122 F. Supp. 2d 703, 709 (N.D. Tex. 2000).

^{351.} *Cent. Office*, 524 U.S. at 223; *accord* MCI Telecomms. Corp. v. Am. Tel. & Tel. Co., 512 U.S. 218, 229 (1994); *see also Maislin Indus.*, 497 U.S. at 126 ("The duty to file rates . . . and the obligation to charge only those rates have always been considered essential to preventing price discrimination and stabilizing rates." (citation omitted)).

^{352.} Gilmore v. Southwestern Bell Mobile Sys., Inc., 156 F. Supp. 2d 916, 924 (N.D. Ill. 2001).

^{353. 47} U.S.C. § 253(a) (2000).

advance universal service."³⁵⁴ By the same token, section 253 also provides that "[n]othing in this section shall affect the application of section 332(c)(3)... to commercial mobile service providers."³⁵⁵ At a minimum, this interlocking cluster of provisions consisting of a general preemption provision, a savings clause for state-law measures related to universal service, and an exception to the savings clause reinstating preemption under section 332 in favor of CMRS providers means that the general preemption provision of section 253 governs an ETC designation proceeding, without the safe harbor otherwise granted to state regulations that are "necessary to preserve and advance universal service." Any narrower interpretation of sections 253 and 332 would provide all the satisfaction that arises when "two different persons seek to drive one car."³⁵⁶ When federal officials determine, as Congress and the FCC have in other contexts, that restrictive regulation of a particular area is not in the public interest, "States are not permitted to use their police power to enact such a regulation."³⁵⁷

The most obvious interpretation of the savings clause in section 253, however, is that preemption under section 332 of state-law regulation of commercial mobile radio takes priority over state-law administration of the ETC designation process. Section 253 specifically addresses the role of state regulators in designating ETCs. Subsection (f) provides that "[i]t shall not be a violation" of federal law and its preemptive effect on state law "for a State to require a telecommunications carrier that seeks to provide telephone exchange service or exchange access in a service area served by a rural telephone company to meet the requirements in section 214(e)(1)" regarding ETC designation.³⁵⁸ But the Act further specifies that "[t]his subsection shall not apply... to a provider of commercial mobile services."³⁵⁹ Quite plainly, the savings clause sheltering ETC designation proceedings under state law has no application when a CMRS carrier is at issue, and preemption under sections 332 and 253 applies with full force.

V. CONCLUSION

When cast strictly in the abstract, as too many questions of law tend to be, the case for federalism seems facile and obvious. Indeed, asserting the need for federal supremacy over local subsidiarity seems downright un-American. Legal paeans to "Our Federalism"³⁶⁰ "conjure[] up images of

^{354.} Id. § 253(b).

^{355.} Id. § 253(e).

^{356.} La. Pub. Serv. Comm'n v. FCC, 476 U.S. 355, 364 (1986).

^{357.} Capital Cities Cable, Inc. v. Crisp, 467 U.S. 691, 708 (1984); accord Ray v. Atl. Richfield Co., 435 U.S. 151, 178 (1978).

^{358. 47} U.S.C. § 253(f) (2000).

^{359.} Id.

^{360.} Younger v. Harris, 401 U.S. 37, 44 (1971).

Fourth of July parades down Main Street, drugstore soda fountains, and family farms with tire swings in the front yard.^{"361} These longings are not toxic *per se*, great judicial careers have been built on little more than a "simple belief in the things [others]... laugh at: motherhood, marriage, family, flag, and the like."³⁶² But the mindless habit of "proclaim[ing] [federalism's] virtues out of the universal desire for self-justification" can transmogrify the conventional defense of American federalism into fanatic dedication to small-scale enterprise, self-sufficiency, and local government.³⁶³

Whatever value these objectives may have in other contexts, their pursuit undermines the development of rational telecommunications policy. In terms of rhetoric and reason, most defenses of federalism in a regulatory setting are reminiscent of an FCC order that ran into Richard A. Posner's judicial buzzsaw a decade ago:

The Commission's majority opinion... consists [mostly] of boilerplate, the recitation of the multitudinous parties' multifarious contentions, and self-congratulatory rhetoric about how careful and thoughtful and measured and balanced the majority has been in evaluating those contentions and carrying out its responsibilities. Stripped of verbiage, the opinion, like a Persian cat with its fur shaved, is alarmingly pale and thin.³⁶⁴

What we forget is that questions of good governance and of economic performance ultimately have empirical answers. "Like all other questions, the question of how to promote a flourishing society [should]... be answered as much by experience [as by] theory."³⁶⁵

True to that wisdom, the Colorado school has proposed to reconcile decentralization with deregulation through concrete case studies. After examining the implementation of the universal service program established by the Telecommunications Act of 1996, this article has extended the Colorado school's enterprise but reached the opposite conclusion. Stateinitiated implementation of high-cost support under the federal universal service program, particularly the determination by state regulatory commissions of the public interest in the designation of competitive eligible

370

^{361.} Edward L. Rubin & Malcolm Feeley, *Federalism: Some Notes on a National Neurosis*, 41 UCLA L. REV. 903, 906 (1994).

^{362.} THE SUPREME COURT UNDER EARL WARREN 152 (Leonard W. Levy ed., 1972) (quoting Justice Potter Stewart's observations on the "great strength" behind Chief Justice Earl Warren).

^{363.} Rubin & Feeley, supra note 361, at 908.

^{364.} Schurz Communications, Inc. v. FCC, 982 F.2d 1043, 1050 (7th Cir. 1992) (Posner, J.).

^{365.} Daniel A. Farber, *Legal Pragmatism and the Constitution*, 72 MINN. L. REV. 1331, 1347 (1988).

telecommunications carriers in rural areas, demonstrates the inherent incompatibility of decentralization with deregulation. Far from promoting market-based solutions to competitive failures, the devolution of power solidifies the grip of dominant incumbents and converts state law into a weapon against competitive entry.

The great shame is that rural and high-cost markets stand to benefit more, not less, than other markets in the transition from conventional public utility regulation to market-based alternatives. "Deregulation ... contains its own technology policy, and a successful one at that."³⁶⁶ The public interest in subsidizing rural telephony rests in aggressive measures to roll out advanced telecommunications infrastructure and services to the geographic and economic limits of the republic. This aspect of universal service depends on two overarching factors. The public interest rests squarely on *competitive neutrality* (including neutrality as between carriers and technological neutrality) and on the *portability* of subsidies among eligible carriers.³⁶⁷ The failure to honor either principle, let alone both, betrays Congress's vision that rural Americans should attain technological and economic parity with their urban counterparts. The "[d]esignation of competitive ETCs promotes competition and benefits consumers in rural and high-cost areas by increasing customer choice, innovative services, and new technologies."368 Portability, for its part, converts USF support into a catalyst of technological innovation by enabling competitive ETCs to exert pressure on ILECs.³⁶⁹ In concert with competitive neutrality, portability helps ensure that "the market, and not local or federal government regulators, determines who shall compete for and deliver services to customers."370

Telecommunications law, like the closely related field of antitrust law, protects "*competition*, not *competitors*."³⁷¹ Like that of the Sherman Act, the purpose of the Telecommunications Act "is not to protect businesses from the working of the market."³⁷² Neither the Telecommunications Act nor any other regulatory law has ever been interpreted to require the government to protect incumbent firms against changes in the marketplace "or to restore values that have been lost by the operation of economic

^{366.} Chen, supra note 54, at 967.

^{367.} See First Order & Report, supra note 65, at 8933.

^{368.} W. Wireless Corp., 16 F.C.C.R. 48, 55 (2000).

^{369.} See First Report & Order, supra note 65, at 8932.

^{370.} Alenco Communications, Inc. v. FCC, 201 F.3d 608, 616 (5th Cir. 2000).

^{371.} Brown Shoe Co. v. United States, 370 U.S. 294, 320 (1962) (emphasis in original); *accord, e.g.*, Atl. Richfield Co. v. USA Petroleum Co., 495 U.S. 328, 338 (1990); *cf.* Olympia Equip. Leasing Co. v. W. Union Tel. Co., 797 F.2d 370, 375 (7th Cir. 1986) (Posner, J.) (intimating that the antitrust laws should not "hold[] an umbrella over inefficient competitors").

^{372.} Spectrum Sports, Inc. v. McQuillan, 506 U.S. 447, 458 (1993); *see also id.* ("The law directs itself... against conduct which unfairly tends to destroy competition itself. It does so not out of solicitude for private concerns but out of concern for the public interest.").

forces."³⁷³ The pecuniary preferences of incumbent service providers cannot negate the public interest in regulatory approval of additional providers.³⁷⁴ Regulators should not confuse the lawful "requirement of sufficient support for universal service within a [competitive] market" with the anticompetitive and unlawful demand that incumbent carriers be given "a guarantee of economic success."³⁷⁵ When ILECs reflexively oppose competitive carriers' petitions for ETC designation in order to secure regulatory "protection from competition," such resistance represents "the very antithesis of the [Telecommunications] Act."³⁷⁶

This is the sense in which regulation by state and local authorities is "probably the source of most of the anticompetitive restraints remaining in the American economy."³⁷⁷ At the dawn of the 1996 Act, a former Federal Communications Commissioner predicted that state regulators would be "relentless in challenging FCC efforts to introduce competition" because of "a well-grounded fear" that federal success in deregulation "would mean higher local residential service rates."³⁷⁸ I would amend Glen Robinson's prescient insight in only one respect: the relentless resistance of state regulators to deregulation has stemmed from a well-grounded fear that deregulation means lower market shares for incumbent carriers. Andrew Koppelman has shown, with great verve, that decentralization in constitutional law can never be decoupled from a substantive civil rights agenda, one that favors entrenched social power.³⁷⁹ In this economic realm, the observation holds true. Decentralization translates, jot for jot, into massive resistance against deregulation and competition.

Perhaps we can be saved by theory, after all. Public choice theory systematically predicts that regulation dissolves into incumbent protection and that regulatory capture is likelier and more tenacious on a local scale. Political blackmail, no gentler term would be accurate, reaches its apex when local firms seek legal protection against outside competition.³⁸⁰

372

^{373.} Mkt. St. Ry. Co. v. R.R. Comm'n of Cal., 324 U.S. 548, 567 (1945); *see also id.* at 554 (distinguishing the regulation of a common carrier's rates from the distinct "problem[s]" faced by "an enterprise that has passed its zenith of opportunity and usefulness, whose investment already is impaired by economic forces, and whose earning possibilities are already invaded by competition from other" firms and technologies).

^{374.} Cf. W. Union Tel. Co. v. FCC, 665 F.2d 1126 (D.C. Cir. 1981).

^{375.} Alenco, 201 F.3d at 625.

^{376.} *Id.* at 622.

^{377.} Daniel J. Gifford, Federalism, Efficiency, the Commerce Clause, and the Sherman Act: Why We Should Follow a Consistent Free-Market Policy, 44 EMORY L.J. 1227, 1253 (1995).

^{378.} Glen O. Robinson, *The New Communications Act: A Second Opinion*, 29 CONN. L. REV. 289, 308 (1996).

^{379.} See Andrew Koppelman, How "Decentralization" Rationalizes Oligarchy: John McGinnis and the Rehnquist Court, 20 CONST. COMMENT. (forthcoming 2003).

^{380.} See ROBERT LAWRENCE & ROBERT LITAN, SAVING FREE TRADE 23-24 (1986); cf. KENICHI OHMAE, THE END OF THE NATION STATE: THE RISE OF REGIONAL

Armed with these insights, we can define the political economy of telecommunications in elegantly descriptive and accurately prescriptive terms. When implemented locally, telecommunications law systematically favors local incumbents. To retain any hope of true competition, federal telecommunications law must exert deregulatory discipline from above. The essential insight of Federalist Paper No. 10 remains valid: because it is impossible and undesirable to force the entire nation to share "the same opinions, the same passions, and the same interests,"³⁸¹ the road toward rational regulation begins with the establishment of a large polity that embraces them all.³⁸²

ECONOMIES 62 (1995) ("If patriotism is . . . the last refuge of the scoundrel, wrapping outdated industry in the mantle of national interest is the last refuge of the economically dispossessed.").

^{381.} THE FEDERALIST NO. 10, at 55 (James Madison) (Edward Meade Earle ed., 1937).

^{382.} See id. at 60-61.

"COOPERATIVE FEDERALISM" GONE WRONG:

THE IMPLEMENTATION OF THE TELECOMMUNICATIONS ACT OF 1996

ROY E. HOFFINGER*

INTRODUCTION

The phrase "cooperative federalism" has been used to refer to "federal programs that charge state agencies – as well as federal ones – with the responsibility of interpreting and implementing federal law."¹ Because cooperative federalism entails "shared federal and state government responsibility,"² it raises difficult and continuing questions about the extent to which the responsibilities of these government entities overlap, and how this overlap may best be accommodated to achieve the program's objectives.

A relatively recent example of a cooperative federalism statute is the Federal Telecommunications Act of 1996 ("the Act").³ Among other things, the Act imposes a duty on incumbent local telephone companies ("Incumbent Local Exchange Carriers" or ILECs) to share portions of their networks with carriers seeking to compete with them, thereby promoting a form of retail marketing competition for telecommunications services.⁴ Because this and other duties imposed by

^{*} Partner, Perkins Coie LLP. The author acknowledges and express his gratitude to Phil Weiser, Don Friedman and Jon Nuechterlein for their comments on prior drafts. However, the views expressed herein are solely the author's.

^{1.} Philip J. Weiser, *Chevron, Cooperative Federalism, and Telecommunications Reform*, 52 VAND L. REV. 1, 3 n.6 (1999) [hereinafter Weiser, *Telecomms. Reform*].

^{2.} John D. Edgcomb, *Cooperative Federalism and Environmental Protection: The Surface Mining Control and Reclamation Act of 1977*, 58 TUL. L. REV. 299 (1983).

^{3.} Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified in scattered sections of 15, 18, and 47 U.S.C.) $\,$

^{4.} See 47 U.S.C. §251(2003); 47 U.S.C. §251 (2003); see also Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, First Order & Report, 11 F.C.C.R. 15,499 (1996) [hereinafter Local Competition Order] (For a detailed description of the Act); Iowa Utils. Bd. v. F.C.C., 219 F.3d 744, 749-50 (8th Cir. 2000) aff'd in part, rev'd in part by Verizon Communications, Inc. v. F.C.C., 535 U.S. 467, 476-77 (2002).

[Vol. 2

the Act are not self-executing, the Act expressly relies upon the Federal Communications Commission ("FCC") and state public utility commissions to fill in the details and otherwise enforce its provisions. In particular, the Act confers on the FCC the same broad and continuing rulemaking authority that it enjoys with respect to interstate telecommunications under the Communications Act of 1934, and expressly requires the FCC to make some of the fundamental determinations left open by the Act's text. In contrast to this broad grant of rulemaking authority, the Act assigns to state commissions the task of arbitrating, based on the Act and FCC regulations, disputes that arise during negotiations between particular ILECs and competitors.

The *federal* Act thus assigns to the *federal* agency the principal role in the continued development of the nation's nascent local competition policy. Over the last several years, however, state commissions have assumed the predominant role in making policy under the Act. The FCC has acquiesced in and even occasionally endorsed outright this shift in responsibilities. Prior to and contemporaneous with these developments, commentators have urged that an enhanced role for state commissions under the Act be encouraged by changing settled law denying deference to state commission decisions during federal judicial review.⁵ Commentators have also contended that federal courts have, in practice if not by rule, deferred to the decisions of state commissions, and that deference is "inevitable" under regulatory statutes addressed to complex matters of technology and pricing such as the Act.

This article shows that the shift toward policymaking by state commissions with respect to local telecommunications competition is contrary to the Act's design, and has imposed enormous litigation and other costs on the industry and consumers as carriers, regulators and other parties engage in interminable debate in multiple fora over the appropriate source and content of proposed rules and decisions. These costs will be increased if, as urged by others, federal courts defer to the decisions of state commissions. To the extent that federal courts have tended to defer to state commission decisions in interpreting or applying the Act, the appropriate response is not to change the law to conform to this practice, but to refer to the FCC, under the doctrine of "primary jurisdiction," issues of law and policy when the proper resolution is in doubt.

Under this view, state commissions will continue to play an important role in the Act's implementation with regard to fact-finding and application of the Act and the FCC's regulations to particular

376

^{5.} See Weiser, Telecomms. Reform, supra note 1, at 27; Philip J. Weiser, Federal Common Law, Cooperative Federalism, and the Enforcement of the Telecom Act, 76 N.Y.U. L. REV. 1692 (2001) [hereinafter Weiser, Federal Common Law].

situations during arbitrations of agreements between ILECs and new entrants. In addition, state commissions can fully participate in resolving interpretive and policy issues arising under the Act by filing comments in rulemaking and other proceedings conducted by the FCC. The FCC can and should be expected to pay special attention to those comments in view of the substantial knowledge and experience accumulated by state commissions in arbitrating and enforcing agreements between ILECs and new entrants.

Part I of this article begins with a brief overview of the Act and the FCC's initial attempt to add substantive content through exercise of its rulemaking authority, with special attention to the interpretation of the Act's requirement that ILECs share portions or "network elements" of their networks at "cost-based" rates. It continues with a discussion of the reaction by state commissions to the FCC's efforts, including their legal challenge to the FCC's jurisdiction to adopt local competition rules, and the Supreme Court's rejection of that challenge. Part I concludes with some important examples of the FCC's subsequent inaction and outright refusal, in the face of continued political backlash by its state commission counterparts, to resolve critical local competition issues, notwithstanding the Supreme Court's unequivocal confirmation and endorsement of its statutory authority to do so. The result, in the words of the FCC's Chairman, is that there is "no meaningful federal policy" with respect to local competition for telecommunications, notwithstanding Congress's adoption of the Act and delegation to the FCC.⁶

Part II addresses legal and policy arguments regarding the enhanced role assumed by state commissions in interpreting and implementing the Act, the corresponding diminution in the FCC's role, and the arguments in favor of deference by federal courts to legal and policy determinations by state commissions. In particular, part II shows that litigation of the same issues before fifty-one state commissions, the same number of federal district courts, and up to eleven courts of appeals is wasteful at best, and denies to the industry the certainty and uniformity needed to attract investment and compete efficiently in regional, national and even international markets. Moreover, continued deference to state commission decisions during federal judicial review, whether by rule or practice, will accelerate the diminution of the FCC's rule, ensuring the absence of any federal standards beyond those incorporated in the vague text of the Act.⁷ Finally, encouraging state "experimentation" through

^{6.} Chairman Michael Powell, Review of Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers (Feb. 20, 2003), *available at* http://hraunfoss.fcc.gov/edoc_public/attachments/DOC-231344A3.pdf.

^{7.} AT&T v. Iowa Utils. Bd., 525 U.S. 366, 397 (1999) (observing that "it would be a gross understatement to say that the 1996 Act is not a model of clarity"). That observation

deference would also threaten achievement of the Act's primary objective, competition between different networks, and not merely "synthetic competition" in the marketing of services provided over the same network.⁸

I. COOPERATIVE FEDERALISM UNDER THE ACT SINCE 1996

A. The Act and the FCC's Local Competition Order

The preamble to the Act states that its purposes are to "reduce regulation" of and "promote competition" for telecommunications services.9 Toward those ends, section 252 of the Act requires the incumbent LECs to enter into agreements ("interconnection agreements") with other telecommunications carriers ("Competitive Local Exchange Carriers," or "CLECs"). These agreements may implement one or more of the entry mechanisms provided for under section 251: (1) linking (i.e., "interconnection" of) the parties' networks, allowing customers served by the network of one party to place and receive calls to and from customers served by the network of the other party ("facilities-based competition");¹⁰ (2) the provision by the ILEC at a "wholesale discount" of its retail telecommunications services to the CLEC for resale;¹¹ and (3) the leasing by the ILEC to the CLEC, at "cost-based" rates, of "loops," "switches," and other network elements, ("UNEs") for the provision of competing telecommunications services (a different form of resale).¹²

The definitions and standards under the Act's key provisions vary between vague, incomplete and nonexistent.¹³ For example, the Act requires the leasing at "cost-based" rates of UNEs that are either "necessary" for the provision of competing telecommunications services, or those without which the provision of such services would be

underscores the need for some entity to clarify and otherwise add content to the many ambiguities and gaps to the Act's provisions.

^{8.} United States Telecom Ass'n v. FCC, 290 F.3d 415 (D.C. Cir. 2002) (*USTA*), cert. denied sub nom. WorldCom, Inc. v. United States Telecom Ass'n, 123 S. Ct. 1571 (2003).

^{9.} Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified in scattered sections of 15, 18, and 47 U.S.C.) (Preamble).

^{10. 47} U.S.C. §251(a), §251(c)(2) (2003).

^{11.} Id. at §251 (c)(4).

^{12.} Id. at §251(c)(3); §251 (d)(1) (2003). "Loops" are the wires that connect homes, offices and other customer premises to the remainder of the carrier's network. Individual calls are delivered to "switches" located in LEC wire centers. Switches are essentially a type of computer processor that route calls to their destinations. The wires and other facilities used to transmit calls between LEC switches, and between LEC switches and long distance switches, are known as "transport" facilities.

^{13.} See AT&T v. Iowa Utils. Bd., 525 U.S. 366 (1999).

"impaired."¹⁴ The Act neither defines nor provides a standard to determine costs, necessity, or impairment. To fill these and other gaps the Act directs the FCC to adopt regulations "implementing" these and other requirements within six months of its enactment.¹⁵ The Act also assigns to state commissions the task of arbitrating disputes between individual ILECs and CLECs in the event they are unable to agree upon the rates, terms and conditions to be included in their interconnection agreement,¹⁶ subject to review by federal district courts at the request of "an aggrieved party."¹⁷ In addition to the Act's substantive provisions, the FCC's regulations form the backdrop for negotiations and, if necessary, state commission arbitrations of interconnection agreements between ILECs and CLECs.¹⁸

In its landmark *Local Competition Order*, the FCC adopted an initial set of regulations intended to answer, or at least to begin to answer, the many questions left open by the Act.¹⁹ In addition to specifying the UNEs that ILECs must lease to CLECs, the FCC adopted and required state commissions to use a particular "forward-looking" methodology – Total Element Long Run Incremental Cost ("TELRIC") – in arbitrating disputes over UNE rates.²⁰ Significantly, the FCC stated that it would "augment" and "refine" its TELRIC and other local competition rules "on an ongoing basis to address additional or unanticipated issues.²¹

In the FCC's proceeding to adopt local competition rules, many state commissions as well as their trade association, the National Association of Regulatory Utility Commissioners ("NARUC") argued that the FCC lacked legal authority to adopt rules that would bind state commissions in arbitrating disputes under the Act. The states also argued that the FCC should decline to exercise any authority it might

20. "Forward-looking cost methodologies" are intended to measure replacement cost, as opposed to "historic," "embedded" or "book" costs. As a forward-looking methodology, TELRIC measures the cost of replacing the incumbent LEC's network (or more accurately, the features and functions provided to customers by the network) using the most efficient technologies, architectures and operating methods that are currently available, at today's prices, under conditions currently prevailing outside the network. *See Local Competition Order*, 11 F.C.C.R. at 15,515 (1996); Verizon Communications, Inc. v. F.C.C., 122 S.Ct. 1646 (2002).

^{14. 47} U.S.C. §251(c)(3), §251(d)(2); 47 U.S.C. §252(d)(1) (2003). A finding of "necessity" is a prerequisite to requiring the incumbent LEC to provide access to an element of its network that is "proprietary." The "impairment" standard applies to all other elements.

^{15. 47} U.S.C. §251(d)(1) (2003).

^{16. 47} U.S.C. §252(b) (2003).

^{17.} See 47 U.S.C. §252(e)(6) (2003).

^{18. 47} U.S.C. §252(c)(1) (2003).

^{19.} Local Competition Order, 11 F.C.C.R. 15,499 (1996).

^{21.} Local Competition Order, 11 F.C.C.R. at 15,535 (1996).

have, allowing the states to fill the resulting void.²² In rejecting these arguments, the FCC emphasized the importance of national rules in reducing "uncertainty" on the part of the industry, regulators and capital markets, preventing "widely disparate state policies" that could hinder the development of local competition, and ensuring "consistent federal court decisions" upon review of specific state commission rulings.²³

The FCC's decision to adopt national rules to govern the pricing and other provisions of the 1996 Act outraged state regulators and NARUC, prompting them to file an appeal that was heard by the United States Court of Appeals for the Eighth Circuit. The Eighth Circuit first stayed and then vacated many of the FCC's regulations, including the TELRIC regulations. The court reasoned that the UNE and other provisions of the Act largely concerned intrastate telecommunications, the regulation of which Congress had left to the states in language undisturbed by the 1996 Act.²⁴

The Supreme Court reversed the Eighth Circuit's decision in *Iowa Utilities Board v. FCC*.²⁵ The Court there held that section 201(b) of the Communications Act of 1934, to which the 1996 was an amendment, "*explicitly* gives the FCC jurisdiction to make rules governing the matters to which the 1996 Act applies."²⁶ The Court emphasized that its holding was not merely faithful to the Act's language, but also consistent with Congress's decision to "federalize" the regulation of local telecommunications competition:

[T]he question in this case is not whether the Federal Government has taken the regulation of local telecommunications competition away from the States. With regard to the matters addressed by the 1996 Act, it unquestionably has. The question is whether the state commissions' participation in the administration of the new federal regime is to be guided by federal agency regulations. If there is any 'presumption' applicable to this question, it should arise from the fact

^{22.} Initial Comments of National Association of Regulatory Utility Commissioners, *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98 at 6-20 (filed May 16, 1996) [hereinafter *NARUC Comments*].

^{23.} Local Competition Order, 11 F.C.C.R. at 15,558-59.

^{24.} Iowa Utils. Bd. v. FCC, 120 F.3d 753, 793-800 (8th Cir. 1997), *rev'd* AT&T v. Iowa Utils. Bd., 525 U.S. 366. (Relying on Section 2(b) of the Communications Act of 1934, the Court reasoned that the Act was insufficient to overcome the presumption created by Section 2(b), except in the few instances where it specifically provided for FCC regulations (*e.g.*, section 251(d)(2)).

^{25. 525} U.S. 366 (1999).

^{26.} Id. at 380 (1999) (emphasis in original).

2003]

that a federal program administered by 50 independent state agencies is surpassing strange.²⁷

B. FCC Regulation of Local Competition Since 1996

The Supreme Court's decision thus ended the debate – or at least the legal debate – whether the FCC or state commissions would take the lead in further defining competition policy in local telecommunications markets. State commissions, however, continued to strongly oppose the FCC's exercise of the authority confirmed by the Court. The FCC's response to these developments has been largely to refrain from further exercise of the authority conferred by Congress and upheld by the Supreme Court to lead the continued development of national local competition policy. Specifically, contrary to its promise in the *Local Competition Order* to "augment" and "refine" its rules to address "additional issues," the FCC has rarely done either. The FCC's silence has created a void that state commissions have filled with their own visions of local competition policy.²⁸

The FCC's silence has been especially conspicuous in the case of UNE pricing and TELRIC, the subjects as to which the FCC's assertion and exercise of jurisdiction most infuriated its state counterparts. An example is the FCC's refusal to address the merits of disputes between AT&T, MCI Worldcom, and Verizon regarding the interpretation and application of TELRIC. In return for the FCC's approval of the license transfers necessary to effectuate its proposed merger with NYNEX, Verizon's predecessor (Bell Atlantic) had agreed that the UNE rates in each of its states would be based upon "forward-looking" costs, which the FCC had defined in the *Local Competition Order* to mean TELRIC.²⁹

^{27.} *Id.*, at 378 n.6 (emphasis in original). Thus, according to the Court, once Congress decided to make local telecommunications competition the subject of federal law, the only "states' rights" issue left to be decided was whether ensuring adherence by state commissions to the new federal policies would be the responsibility of the FCC or federal courts, a "detail" that the Court found incapable of inspiring "passionate" debate. *Id.* Experience has shown, however, that absent FCC regulations applying the Act's broad concepts to particular situations, state commissions have enormous leeway to shape the Act to suit their own policy and political preferences, which very likely accounts for the great "passion" that this debate has aroused both before and after the Court's decision. *See also*, Weiser, *Telecomms. Reform, supra* note 1; Level 3 Communications, LLC v. Pub. Util. Commiss'n of Or., CV 01-1818-PA, slip op. (Or. Ct. App. Nov. 25, 2002).

^{28.} There is no evidence that state commissions have made their local competition decisions reluctantly, and would have preferred that the FCC make these decisions instead. State commissions have rarely if every called for FCC action with respect to local competition. This is not be confused with state commissions urging the FCC to choose a particular resolution of an issue should their efforts to persuade the FCC to allow them to make the choice prove unsuccessful.

^{29.} See Bell Atl./NYNEX, Order, 12 F.C.C.R. 19,985 (1997) (approving Bell Atlantic/NYNEX merger subject to conditions).

[Vol. 2

After the merger was approved, AT&T Corp. and MCI WorldCom filed formal complaints with the FCC under section 208 of the Communications Act alleging that Verizon had failed to comply with the merger condition on UNE rates.³⁰ During its proceeding on the complaints, the FCC was urged by state commissions to respect their decisions and not reach the merits of the complaints. The FCC ultimately refused to address any of the fundamental methodological disputes raised by the parties' extensive pleadings. Instead, the FCC found that allowing the prosecution of the complaints would interfere with the states' rate-setting processes, and dismissed the complaints based on principles of "comity."³¹

Most recently, in its *Triennial Review Order*, the FCC delegated to the states the responsibility for determining under the Act many of the UNEs to which ILECs must provide access to their competitors at costbased rates.³² This development is especially noteworthy, for the Act specifically provides that "the Commission" [*i.e.*, the FCC], not the states, shall make these determinations.³³ Following extensive lobbying by NARUC, state commissions and individual state commissioners, however, the FCC accepted the argument that state commissions would be better able to resolve the "factual" issues raised in its proceeding – a proposition disputed by the CLECs in prior proceedings on UNEs,³⁴ and by the ILECs in the Triennial Review proceeding.³⁵ Significantly,

^{30. 47} U.S.C. § 208 (2003).

^{31.} AT&T Corp. v. Bell Atl. Corp. & MCI Telecomms. Corp. & MCImetro Access Transmissions Servs., Inc. v. Bell Atl. Corp., *Memorandum Opinion and Order*, 15 F.C.C. R. 17,066 (2000). The FCC recently released a notice of proposed rulemaking initiating what it described as "its first comprehensive review of the rules applicable to the pricing" of network elements. Review of the Commission's Rules Regarding the Pricing of Unbundled Network Elements and the Resale of Service by Incumbent Local Exchange Carriers, WC Docket No. 03-173, Notice of Proposed Rulemaking, FCC 03-224 (FCC), (released September 15, 2003), ¶ 1. In the NPRM, the FCC sought comment on proposals to modify and clarify its pricing rules in several significant respects. *Id.* at ¶ 9. It is reasonable to assume, based on their opposition to the FCC's initial decision to adopt pricing rules, and their continued opposition to other FCC rulemakings under the Act, that state commissions will, either themselves or through NARUC, strongly oppose the adoption of any modifications or clarifications that may constrain their discretion in setting rates for network elements.

^{32.} Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, *Report and Order and Further Notice of Proposed Rulemaking*, CC Docket No. 01-338 [hereinafter *Triennial Review Order*]. These include switching and "dedicated transport," which are transmission facilities within the telephone network dedicated to the use of a particular carrier or customer. By delegating to state commissions the decisions on the availability of the switching UNE, the FCC effectively delegated the decision whether ILECs must continue to provide the "UNE platform," which is the combination of UNEs that comprise an ILEC's local network in its entirety. In the FCC's proceeding, state commissions vehemently urged the FCC to allow them to decide the fate of the UNE platform.

^{33. 47} U.S.C. §251(d)(2) (2003).

^{34.} See infra notes 67-68 and accompanying text.

^{35.} Id.

both incumbent LECs and CLECs had argued that the outcome in each state would reflect its own "policy preferences," not "evidence" or "facts," regardless whether the FCC's delegation was accompanied by standards for states to apply.³⁶

With the delegation of UNE decisions to state commissions, the regulation of local competition since 1996 has now come almost full circle. Although the Act was supposed to have "taken the regulation of local telecommunications competition away from the States" in favor of a new federal policy overseen by the FCC, we now have a regime where "state regulators set retail rates, state regulators set all wholesale rates, and state regulators determine what elements will be available."³⁷ As a result, there is no "meaningful federal policy" regarding local telecommunications competition.³⁸

II. HOW COOPERATIVE FEDERALISM SHOULD WORK IN THE IMPLEMENTATION OF THE TELECOMMUNICATIONS ACT

Scholars³⁹ and regulators⁴⁰ have argued that an enhanced role for state commissions in interpreting the Act and developing and applying its policies is consistent with if not required by the Act, and will achieve greater benefits than if the states' role were more limited. Correlatively, it has been suggested that such a role should be encouraged by requiring

^{36.} See infra note 67-68. In its Triennial Review Order, the FCC did not respond to these arguments except to note that the "federal guidelines" it had adopted would ensure that the states' "unbundling decisions are implemented "consistently with the Act's purposes" and "in a carefully targeted manner." Triennial Review Order at ¶ 189. The "guidelines to which the FCC refers are a laundry list of broadly defined criteria relevant to the economic feasibility of entering a market through means other than using an ILEC's facilities." Id. at ¶ 84-91. The Order offers little in the way of objective measurements to assess any single criteria, or formulae for weighing the criteria against one another. Thus, "states are free to do what they choose in weighting the [FCC's] economic criteria in divergent and subjective ways." Powell, supra note 6 at 8. Further, the FCC's Order also delegates to individual state commissions the responsibility for determining the geographic and customer "markets" to which the criteria are to be applied. See e.g., Triennial Review at 495; see also Powell, supra note 6 at 7 (noting "unheeled discretion" to define markets accorded to state commissions by Triennial Review Order). For these reasons, if there is any consistency in the outcome of state proceedings, it is more likely to be a function of their common policy "belief in the beneficence of the widest unbundling possible," rather than to adherence to a coherent federal policy reflected in the FCC's "guidelines" for unbundling. USTA, 290 F.2d 415, 427 (2002). See Letter from Joan Smith (NARUC) to Chairman Michael K. Powell (FCC), December 5, 2001 (conveying NARUC's support for the "universal availability of" the UNE-Platform).

^{37.} Powell, *supra* note 6, at 3 (observing that the FCC's proceeding was "transformed into a battle not over what should be unbundled, but who should decide – this Commission or the states," and that "the role of the states dominated this proceeding").

^{38.} Id.

^{39.} See Weiser, Telecomms. Reform, supra note 1.

^{40.} See, e.g., Robert B. Nelson, Cooperative Federalism: The State Regulatory Perspective, 2000 L. Rev. Mich. St. U. Det. C.L. 41 (2000).

federal courts to accord "Chevron-like" deference to the decisions of state commissions during judicial review.⁴¹ The remainder of this article argues that a role for state commissions beyond fact-finding in the arbitration or enforcement process is not contemplated by the Act. According deference to the decisions of state commissions during judicial review, whether by rule or practice, would result in a further diminution of the FCC's role, cementing in place or aggravating the debilitating uncertainty that currently plagues the industry, and could defeat or delay the attainment of facilities-based competition.

A. The Law and Congressional Intent

The argument that Congress desired or at least accepted the possibility that states would make—and courts would affirm—fundamental yet divergent policy decisions under the Act is based entirely on section 252's designation of state commission to arbitrate interconnection agreements.⁴² This inherently circular argument reduces to the following proposition: Congress must have understood that state commissions would resolve fundamental policy issues in arbitrating interconnection agreements, because otherwise Congress would not have designated them as arbitrators.

This argument is undermined if not refuted by other provisions in the Act, and by judicial decisions that provided the backdrop against which Congress is presumed to have legislated. As a preliminary matter, it is most peculiar to infer from the appointment of state commissions to "arbitrate" disputes arising in negotiations of interconnection agreements that Congress intended to confer upon state commissions a major role in making federal policy. Arbitration proceedings typically call for the application of existing law and policy to a set of facts in an adjudicatory context.⁴³

More fundamentally, the inference from the Act's arbitration provisions that Congress expected the Act to be implemented through non-uniform policy determinations of state commissions is undermined if not foreclosed by the Act's designation of the FCC as the principle

384

^{41.} Weiser, *Telecomms. Reform*, supra note 1, at 9.

^{42. 47} U.S.C. §252(e) (2003).

^{43.} In arbitrating interconnection agreements between CLECs and Verizon in Virginia, for example, the FCC's Wireline Competition Bureau deemed it inappropriate to use the proceeding to extend existing law or precedent. *See* Pet. of WorldCom Pursuant to Section 252(e)(5) for Preemption of the Jurisdiction of the Virginia State Corporation Commission Regarding Interconnection Disputes with Verizon and for Expedited Arbitration, Memorandum *Opinion and Order*, 17 F.C.C.R. 27,039, 31,635 (2002) [hereinafter *FCC Va. Arbitration Order*]. The Bureau conducted the arbitration after the Virginia commission, concerned about the prospect of having to defend its decisions in federal court under section 252(e)(6), declined to do so.

entity to adopt and revise regulations interpreting the Act and effectuating its underlying policies, and by the Act's provision to federal courts of exclusive jurisdiction to review state commission determinations. Section 251(d)(1) requires the FCC to adopt within six months of enactment regulations to guide the determinations that state commissions would be called upon to make in arbitration proceedings. In response to section 251(d)(1), the FCC adopted its Local Competition Order.⁴⁴ Subsequent regulations are authorized by section 201(b)'s grant of jurisdiction to the FCC to "prescribe such rules and regulations as may be necessary in the public interest to carry out the provisions of this Act"-provisions that include sections 251 and 252.45 The Act requires state commissions to ensure that arbitrated interconnection agreements comply with the FCC's local competition regulations.⁴⁶ These provisions evidence an expectation by Congress that state commissions would be governed by a significant body of FCC precedent, enhancing the prospects for uniformity.

In addition, the Act authorizes federal judicial review of interconnection agreements,47 including the arbitration decisions reflected in the agreements, and expressly precludes review in state These provisions are additional evidence that Congress court.⁴⁸ ultimately expected consistency in the application of federal law, notwithstanding the participation by state commissions in the implementation process. When Congress considered and adopted the Act, it was "well settled that 'federal statutes are generally intended to have uniform nationwide application.""49 Correlatively, it was equally well settled that federal courts do not defer to the construction or interpretation of federal statutes by state agencies, even where the agency is performing a function authorized by Congress.⁵⁰

In sum, the Act's broad delegation of responsibility to the FCC and federal courts, providing for control at both the front and back ends of the implementation process, is powerful evidence that Congress expected the evolution of federal telecommunications policy to be guided by federal entities, allowing for variations only as warranted by specific factual circumstances. If Congress had intended states to establish important yet divergent telecommunications policies, it would have given some indication other than merely providing for state commission

^{44.} See Local Competition Order, 11 F.C.C.R. 15,499 (1996).

^{45. 47} U.S.C. §201(b) (2003). See AT&T v. Iowa Utils. Bd. 525 U.S. 366 (1999).
46. 47 U.S.C. §252(e)(2)(B) (2000).

^{47.} See 47 U.S.C. §252(e)(6) (2003).

^{48.} See 47 U.S.C. §252(e)(4) (2003).

^{49.} Weiser, Telecomms. Reform, supra note 1, at 11 (quoting Turner v. Perales, 869 F.2d 140, 141 (2d Cir. 1989)) (per curiam).

^{50.} Turner, 869 F.2d at 141; Perry v. Dowling, 95 F.3d 231, 236 (2d Cir. 1996).

arbitration of disputes that arise in private negotiations of interconnection agreements.

B. Policy Arguments Against an Expansive State Role and Judicial Deference

The view that states should assume a major policy role in implementing the Act is likewise unsustainable even when factors other than Congressional intent and precedent are considered. An expansive policy role for the states, unchecked by either the FCC or federal courts, will (1) result in a patchwork of individualized rules leading to enormous inefficiencies in an industry that is national and even global in scope, (2) require that potentially every legal or policy issue arising under the Act be litigated before multiple state commissions and federal courts, leading to enormous uncertainty among carriers, investors and consumers, and (3) allow states to retain certain aspects of their legacy regulation even where incompatible with the Act's objectives.

Many carriers today desire to provide their services on a regional, national and even global basis. Medium and large business customers with locations in different states or countries frequently prefer to deal with a single carrier, under a single, integrated arrangement, to meet their telecommunications needs. A patchwork quilt of regulations that vary from state to state either forecloses or increases substantially the operating expenses of such carriers and hinders their efforts to meet the demands of multi-location customers. The adoption by different states of different rate structures (*i.e.*, the individual components of charges associated with a particular order) for the same network elements, for example, could require carriers to replace or undertake costly upgrades to their billing systems. These costs are either passed on to consumers in the form of higher prices, or absorbed by carriers at the expense of network upgrades necessary to provide broadband and other services.

A scheme that allocates most decision making authority under the Act to state commissions—whether by express delegation or FCC inaction—increases uncertainty at a time when the industry can least afford it. Such uncertainty, which is by far the most compelling reason to reject the expansive role that the FCC has allowed state commissions to assume, is not a function of any inherent superiority of federal over state agencies in formulating and implementing law and policy. The uncertainty is a function of decision making by multiple agencies, as opposed to a single one; greater certainty is provided by a *single* proceeding that results in a single decision by the FCC, rather than *fifty-one* proceedings before state commissions on the same issue.

386

Absent a controlling FCC regulation or decision, each issue must be decided by up to fifty-one state commissions, the same number of federal district courts, and eleven federal circuit courts of appeal. In addition to litigation costs, the "grea[t] uncertainty" inherent in such a process "frustrate[s] the ability of carriers to plan" their business strategies, hinders carriers in their efforts to "raise capital" to build, maintain and their networks," and "complicate[s] negotiation enhance of interconnection agreements," as the FCC explained in 1999 in refusing to delegate the unbundling determinations to the states.⁵¹ It is thus hardly surprising that the share prices of ILECs, CLECs and even equipment suppliers materially declined when, four years later, the FCC announced that it was changing its position and delegating to state commissions the authority to make these determinations.⁵² Investment analysts expressed "enormous uncertainty about the tele[communications] industry" resulting in "a very high level of risk," and urged investors to "move their funds to other industries."53

Finally, the absence of FCC decisions or regulations resolving particular issues, and stringent federal judicial review of state commission decisions, increases the risk that when faced with a potential conflict between the Act's pro-competitive deregulatory policies and legacy state regulation, state commissions will tailor their decisions to accommodate the latter at the expense of the former.⁵⁴ For example, potential new entrants in at least some local telecommunications markets face the prospect of competing for residential customers against subsidized or even "below-cost" incumbent LEC rates required by legacy regulations adopted by state legislatures or commissions.⁵⁵ In this circumstance, a state commission has three options when determining the rates ILECs may charge CLECs for UNEs used to provide competing services: (A) set cost-based rates for UNEs, as required by the Act, without adjusting

^{51.} Implementation of the Local Competition Provisions of the Telecomms. Act of 1996, *Third Report and Order and Fourth Further Notice of Proposed Rule Making*, 15 F.C.C.R. 3696, 3768-70 (1999).

^{52.} Health of the Telecommunications Sector: A Perspective from the Commissioners of the Federal Communications Comm.: Hearing Before the House Subcomm. on Telecomms. and the Internet, 108th Cong. (2003) (statement of Michael K. Powell, Chairman, F.C.C., quoting Commerce Capital Markets, Telecom Regulation, F.C.C. Triennial Highlights, 5 (2003)).

^{53.} *Id.; See also* Telecommunications Reports, June 5, 2003 (reporting that survey of CEOs and finance officials "complained of uncertainty caused ... by the decision to let state regulators determine the future availability of unbundled switching and the unbundled network element platform")

^{54.} See NARUC Comments, supra note 22, at 20 (opposing FCC regulations because, *inter alia*, they might interfere with "existing State price cap regimes"); Nelson, *supra* note 40 (objecting to FCC rules interpreting the Act on the ground that they "could abrogate years of state commission actions").

^{55.} See generally USTA, 290 F.3d 415, 422 (D.C. Cir. 2002).

the incumbent's retail rates; (B) set UNE rates below cost in order to induce competitive entry, without adjusting the incumbent's retail rates; or (C) set cost-based rates for UNEs, and adjust the incumbent's existing retail rates (*i.e.*, "rate rebalancing").

Option A (*i.e.*, setting UNE rates equal to cost), although faithful to the UNE pricing provisions of the Act, would not further the Act's objective of creating conditions necessary for local competition. Specifically, when wholesale prices are set higher than resale prices, competition through resale is infeasible. New entrants will not construct alternative facilities to compete against incumbent' retail rates that are set below cost. Option B (*i.e.*, setting UNE rates below cost) violates the Act's UNE pricing provisions *and* further reduces the incentives of new entrants to invest in alternative facilities. Nevertheless, Option B has some appeal to regulators due to its potential to induce "synthetic" resale "competition" through UNEs, at the expense of reduced incentives for investment in facilities by incumbents and new entrants, a harm that regulators may perceive as more remote than the "benefit" of additional resale competition.⁵⁶

Only Option C, which includes rate rebalancing, is consistent with both the language and purposes of the Act. No one, however, has suggested that states have engaged in any significant rate rebalancing initiatives since the Act's adoption. Notably, the failure to rebalance retail local rates leaves in place historic state policies favoring the use of government regulation to prevent the operation of market forces that could otherwise drive prices to cost. ⁵⁷ Significantly, in comments in the FCC's local competition proceeding, NARUC urged the FCC to reject the concept of federal pricing rules in favor of state commission rules that would "vary from State to State" in order to preserve "commissionbrokered residential rate freezes and" and prevent the "disrupt[ion] of existing state price cap regimes."⁵⁸ The preservation of state monopoly regulation, however, is the very antithesis of federal policy, reflected in the Act, to "reduce regulation" and "promote competition."

^{56.} See USTA, 290 F.3d at 424.

^{57.} To be sure, the Act also codifies federal "universal service" policies served by "affordable" rates for telecommunications services. 47 U.S.C § 254 (2003). But the Act does not mandate retention of existing or other retail rates, and contemplates the adoption of measures that would permit the attainment of universal service objectives while minimizing interference with market forces. In this regard, the FCC's failure to complete reform of universal service mechanisms has likely been a contributing factor in the states' failure to rebalance rates.

^{58.} NARUC Comments, supra note 22, at 20.

C. Policy Arguments in Favor of an Expansive State Role and Judicial Deference

As noted above, proponents of an enhanced role for state commissions have urged federal courts to defer during judicial review to state commission interpretations and applications of the Act, analogizing to the deference given by the courts to federal agencies under *Chevron v. U.S.A. Inc. v. Natural Resources Defense Council, Inc.*⁵⁹ Under *Chevron*, federal courts are required to defer to the interpretation of a federal statute by the federal agency's interpretation is contrary to the statute's plain meaning. Thus, in the telecommunications context, federal courts defer to the interpretations of federal statutes, including the Act, which it administers.⁶⁰ Consistent with pre-Act law refusing to defer to the interpretations of federal law by state agencies, federal courts have held uniformly that they will apply a *de novo* standard of review to non-factual determinations by state commissions under the Act.⁶¹

Proponents of delegation to state commissions and a deferential standard of federal judicial review contend that pre-Act precedent and the arguments against deference are outweighed by (1) the superior ability of state commissions to tailor implementation of the Act to local circumstances,⁶² (2) the benefits of state "experimentation,"⁶³ and (3) limitations on the resources of the FCC and the ability of courts to address "policy" and "technical issues.⁶⁴ The proponents rarely specify, however, the nature of the "local circumstances" to which state commissions are supposedly better able to tailor implementation of the Act. To the extent that "local circumstances" include prevailing state and local regulatory conditions and policy preferences, their argument undermines the case for deference to state agencies. Otherwise, a state's legacy regulatory scheme could effectively preempt the objectives of the Act; as suggested in the preceding section.

It is more likely that the "local circumstances" to which the proponents of deference refer are factual. In this context, their argument

^{59. 467} U.S. 837, 842-45 (1984).

^{60.} See, e.g., Tex. Coalition of Cities v. FCC, 324 F.3d 802 (5th Cir. 2003); AT&T v. FCC, 323 F.3d 1081 (D.C. Cir. 2003).

^{61.} See, e.g., Southwestern Bell Tel. Co. v. Public Utils. Comm'n of Tex., 208 F.3d 475, 482 (5th Cir. 2000); AT&T v. Bell Atl., 197 F.3d 663, 668 (4th Cir. 1999); US W. Communications v. MFS Intelnet, Inc., 193 F.3d 1112, 1117 (9th Cir. 1999).

^{62.} Weiser, Federal Common Law, supra note 5, at 1699; see also Ed Petrini, Federalism and Beyond: The Uncertain Nature of Federal/State Relationships in a Restructuring World 5 RICHMOND J.L & TECH. 5 (Fall 1998).

^{63.} Weiser, Federal Common Law, supra note 5, at 1701-03.

^{64.} Id. at 1724.

questions the wisdom of applying the same rule in both New York and Montana, for example, and how someone located in Washington D.C. could make rules for either locale.⁶⁵ One answer is that federal rules can be sufficiently flexible to accommodate genuine differences in facts. The FCC's TELRIC pricing rules permit, indeed require, states to account for differences in population density that may impact the costs to be considered in determining UNE rates.⁶⁶ In all events, differences in facts rarely if ever correspond to state borders. It is difficult to understand why, for example, a regulator located in Washington D.C. is any less able than a regulator in Atlanta, Georgia to consider population density in and other facts relevant to cost determinations in rural Georgia. If factual differences support a shift in decision-making authority under the Act away from the federal government, that shift should lead to county or even municipal regulation rather than state regulation – a shift that no one has proposed.

In all events, as both CLECs and ILECs have observed, different resolutions of the same issue by different state commissions are far more likely to reflect policy rather than factual differences. In opposing FCC delegation to the states of UNE determinations four years ago, AT&T explained that "[a]ny process that involves individualized decisions by state commissions would inevitably give free play to [state policy] differences, and would create a patchwork of decisions on the availability of network elements that would reflect not the application of the congressional standards to different sets of facts, but the application of radically different standards that would subvert the national policy established by Congress."67 More recently, in the FCC's UNE Triennial Review proceeding, several large ILECs specifically cautioned the FCC against permitting states to make their own ultimate determinations on the basis of "broad and subjective" factual criteria that could be manipulated to yield outcomes conforming to their individual policy preferences.⁶⁸ The observations of CLECs and ILEC alike suggest a

^{65.} Petrini, *supra* note 62 (from statement of Mark J. Mathis, Vice President and General Counsel, Bell Atlantic Network Service).

^{66.} Weiser, *Telecomms. Reform, supra* note 1, at 18.

^{67.} Reply Comments of AT&T Corp., Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, at 57-58 (filed June 10, 1999). Significantly, during the FCC's recent Triennial Review proceeding, AT&T did an "about face" and supported delegation to the states. Not coincidentally, prior to AT&T's change of position, Michael Powell, who had expressed concerns about the impact on investment incentives of the FCC's existing UNEs rules, became FCC Chairman, while many states expressed support for retaining those rules.

^{68.} See SBC Communications, Inc., Southwestern Bell Tel. Co., and Southwestern Bell Communications Servs., Inc. d/b/a Southwestern Bell Long Distance for Provision of In-Region, InterLATA Services in Arkansas and Missouri, *Memorandum Opinion and Order*, CC Docket No. 01-194, (2001); *See* Powell, *supra* note 6 (noting that the FCC's Triennial Review Order "provide[s] a laundry list of microeconomic criteria that a state may consider,

need for more rigorous review of factual determinations by state commissions, not deference to their legal or policy determinations.⁶⁹

Another argument asserted in favor of a more expansive role under the Act for state commissions, and deference by federal courts to their decisions, is that states could then serve as "laboratories" free to "experiment," compete with, and learn from one another.⁷⁰ The principal response to that argument is that the "benefits" of such experimentation are outweighed by the uncertainty and other costs it creates, as described above. But the "experimentation" concept suffers from additional flaws.⁷¹ An important premise of the "experimentation" argument is that if state commissions are accorded deference, they will resolve issues in the manner they believe will maximize the ability of their states to compete with each other for capital investment and jobs.⁷² Yet proponents of a rule requiring such deference do not appear to have considered the potential impact on attainment of the Act's objectives and have ignored the possibility that such a rule may introduce bias toward CLECs, particularly non-facilities-based CLECs.

A state commission generally has far more control over investment decisions by ILECs than those by CLECs. A state commission cannot legally or practically *order* CLECs to enter the state, and their authority to order a CLEC already present to expand its offerings within the state is constrained by federal and state law,⁷³ and by practical limits on CLEC resources. The commission must instead *encourage* voluntary CLEC entry and expansion by offering inducements, often at the expense of ILECs. In contrast, a state commission need not resort to such indirect measures to secure investment in its state by its ILECs. For example, the commission can simply order ILECs to adhere to more stringent service quality standards, requiring additional service technicians or network upgrades. As a result of the asymmetry in its authority over ILECs and CLECs, a state commission is more likely to perceive its

but the list is not exhaustive and states are free at bottom to do what they choose"): Kathleen Q. Abernathy, F.C.C. Commissioner, Press Statement, Review of Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers (Feb. 20, 2003) ("the decision [in the FCC's Triennial Review Order] to make only vague presumptive findings on switching impairment and to delegate virtually unlimited discretion to state commissions abdicates our statutory responsibility").

^{69.} Weiser, Federal Common Law, supra note 5, at 1740.

^{70.} See id. at 1701-03.

^{71.} Preliminarily, no one has identified any federal obstacle prior to the Act to the adoption by a state of laws and regulations to promote competition for local telecommunications services. Indeed, many states claimed in the FCC's 1996 rulemaking proceeding that they had adopted their own measures intended to introduce or promote local competition. One might then ask why, if Congress were satisfied with the status quo, it bothered to adopt the Act.

^{72.} Weiser, Federal Common Law, supra note 5, at 1700-01.

^{73.} See, e.g., 47 U.S.C. § 253 (2003).

decisions implementing the Act as having greater impact on its relative ability to attract investment by the latter. According deference to different state commission decisions on the same issue may further skew the results in favor of CLECs. Otherwise, a state commission that takes a more even-handed approach will place its state at a competitive disadvantage in attracting CLEC entry and investment.

Such a bias is also more likely to favor UNE-based (*i.e.*, resale) competition over facilities-based competition. In proceedings to establish UNE rates CLECs argue to state commissions that high rates will prevent them from entering or expanding their offerings within the state, while ILECs argue that low rates will discourage investment in new facilities by both ILECs and CLECs. UNE-based competition, however, can develop much sooner than facilities-based competition. Regulators, like most of the population at large, are not very patient. Accordingly, state commissions are likely to err on the side of setting UNE rates low in their "competition" for immediate results, delaying if not foreclosing the attainment of facilities-based competition, the Act's ultimate objective.⁷⁴

An even more basic flaw in the "experimentation" argument for according deference to state commission decisions is revealed in the terminology by which the argument is expressed: states should be allowed to make decisions interpreting or implementing the Act as "appropriate," or provided they comply with "basic federal standards," or fall within a "reasonable range."⁷⁵ All of these formulations reflect an inability to draw any practical line between "policy" decisions that should be made by the FCC, and those that should be made by the states. As a result, regulators and the industry become mired in endless battles regarding which side of the line a particular issue falls, and the FCC is subjected to increased pressure to affirmatively or through inaction set the line on the side of no federal standards at all.

The final argument in favor of according judicial deference to state commission decisions is that the FCC cannot anticipate or lacks the resources to address every issue arising under the Act.⁷⁶ That the FCC cannot anticipate every issue is true but irrelevant to the question of whether it should address those issues that it *can* anticipate (or are brought to its attention). Moreover, there has been no empirical analysis

^{74.} Weiser, *Federal Common Law, supra* note 5, at 1736-38. Raymond Gifford, the Chairman of the Colorado Public Utilities Commission ("CPUC") until earlier this year, described the strategy of some CLECs as "intimidating the regulators into giving them the (Bell's) network at prices that will induce entry," rather than "competing by differentiating [their] products or being more efficient than [their] rivals." Kris Hudson, *AT&T to Offer Local Service in 2 Major Quest Markets*, DENV. POST, Sept. 19, 2003, at C2.

^{75.} Weiser, *Telecomms. Reform, supra* note 1, at 31, 32, 12.

^{76.} See Weiser, Federal Common Law, supra note 5, at 1699.

of the relative resources available to state commissions and the FCC to decide non-factual issues arising under the Act.⁷⁷ In all events, the issue is not whether state commissions should decide issues necessary to arbitrate disputes over the terms to be included in, or enforce, interconnection agreements. The Act expressly authorizes state commissions to resolve disputes that arise in negotiations, and it has been uniformly construed to permit state commissions to enforce agreements. This explicit and unquestioned delegation to states to resolve factual disputes and apply the law to particular facts in arbitration and enforcement proceedings minimizes the drain on FCC resources, which can instead be applied to legal and policy issues.

III. THE SUPPOSED "INEVITABILITY" OF AND ALTERNATIVES TO DEFERENCE

Proponents of a rule requiring that federal courts accord "Chevronlike" deference to state commission decisions under the Act have observed that even absent a formal rule, courts have adopted a variety of approaches that are the equivalent of deference, without using the term.⁷⁸ That courts defer *sub silentio* to state commission decisions, however, is not a reason to adopt a rule promoting or legitimizing that behavior. To the contrary, the courts should modify their practices to conform to the statutory design and pre-Act precedent. A ready alternative, referral to the FCC, is available for those cases where courts are unable to discern the resolution of a legal or policy issue that best complies with the Act and FCC precedent, or furthers the Act's objectives.

As the Supreme Court explained in *Iowa Utilities Board*, the Act assigns to federal courts an important role in ensuring that state

^{77.} Unlike the FCC, state commissions usually are responsible for the regulation of other industries, such as electric power and natural gas, in addition to communications. Further, the staff and other resources of state commissions vary widely. Former CPUC Chairman Gifford has noted that state commissions are "vastly different" from the FCC and therefore "simply don't have the staff and resources to perform the analysis at the same level and caliber" as the FCC. "Panelists Question States' Ability to Handle 'Triennial Review' Mandates, Telecommunications Reports Daily (Sept. 24, 2003).

^{78.} Weiser, *Telecomms. Reform, supra* note 1, at 50-53. A more recent and especially obvious example is Level 3 Communications, LLC v. Public Util. Comm'n of Oregon, CV 01-1818-PA, slip op. (Or.Ct. App. Nov. 25, 2002), in which the court deferred to a decision of the Oregon state commission after concluding that the language of the Act and the FCC's regulation provided no "clear answer" on the legal issue before it. The court's opinion includes no analysis whatever of the Act's objectives or FCC decisions addressing related issues. Federal court decisions such as these provide state commissions with strong incentives to oppose the promulgation by the FCC of additional regulations that would have the effect of constraining the discretion they would otherwise enjoy.

commissions adhere to federal law and policy.⁷⁹ Even assuming Congress considered state commissions to be more capable than federal courts of selecting the resolution of a particular issue that best comports with the Act and its objectives – a proposition unsupported by the Act itself – Congress may have believed this consideration to be outweighed by the costs imposed on the industry and the economy by inconsistent state commission decisions on the same issues, or by concerns that state commissions would be more inclined in deciding doubtful issues to favor legacy state regulation and policy at the expense of the Act's objectives. If so, then deference does serious damage to the Act's design.

More fundamentally, the proponents of judicial deference err by presupposing that the choice of entities to interpret vague and ambiguous statutory provisions is limited to the courts or state commissions. That choice arises, however, only in the absence of applicable FCC rules or decisions. The arguments in favor of deference appear to assume that deference will not affect the number of issues that must be resolved by either state commissions or the courts. Yet, deferring to state commission decisions, whether by rule or practice, is likely to result in even fewer FCC rules and decisions interpreting and applying the Act, a corresponding increase in the necessity of state commissions or federal courts to perform these functions, and diminished prospects for the evolution of federal telecommunications policy expected by Congress.

Under *Chevron*, deference is not appropriate if the agency's decision is inconsistent with the language of the statute at issue. When making or reviewing decisions under the Act, state commissions and federal courts are required to consider in addition to the statutory language any unambiguous FCC regulations or decisions concerning the issue before it.⁸⁰ In other words, deference would be appropriate only in the absence of FCC precedent that clearly and unequivocally requires a different result. Thus, the expectation of state commissions that their decisions will be accorded deference by federal courts in the absence of controlling FCC precedent could increase their opposition to the exercise by the FCC of its authority to issue new rules or decisions. This expectation likely explains the "passionate" character of the debate over "states' rights" questioned by the Supreme Court in AT&Tv. Iowa Utilities Board.⁸¹In addition, a rule legitimizing such deference would also make it easier

^{79.} AT&T Corp. v. Iowa Utils. Bd., 525 U.S. at 378-79 n.6 ("[I]f the federal courts believe a state commission is not regulating in accordance with federal policy they may bring it to heel.").

^{80. 47} U.S.C. \$252(c)(1) (2003) (expressly requires that state commission decisions comply with regulations adopted by the FCC under \$251).

^{81. 525} U.S. at 378 n.6.

for the FCC to excuse its own inaction, if not increase its reluctance to take action over the objections of its state counterparts.

For these reasons, federal courts should not defer to state commission decisions on legal or policy issues, but should instead carefully scrutinize those decisions and endeavor to resolve the issue in a manner that best comports with the language and objectives of the Act, as informed by any relevant FCC decisions – including its decisions on different but related issues. Although not entitled to deference, the decision of the state commission may guide the court if its reasoning is sufficiently compelling and supported. In this regard, an understanding by state commissions that their decisions will *not* be accorded deference may not only lessen their incentives to oppose FCC action, but may also cause them to more carefully consider the Act's underlying policies and relevant FCC precedent, and to provide more thorough explanations of their decisions for the benefit of the reviewing court and the parties.

Of course, certain cases may present issues for which no superior resolution is apparent from the Act, FCC precedent, or *de novo* review of the state commission's decision and reasoning. In these cases, the court should refer the issue to the FCC under the doctrine of primary jurisdiction, and request the FCC to respond to the referral within a specified period of time.⁸² Referrals in these cases will assist the FCC in identifying the issues for which its further guidance is truly necessary, and reinforce its role as the primary administrator of *federal* telecommunications laws and policies. Although the FCC expressly invited such referrals in its 1996 *Local Competition Order*,⁸³ federal courts have rarely referred to that agency issues arising under the Act⁸⁴ In addition, Congressional committees responsible for oversight of the FCC's responses. Such measures will assist Congress in ensuring that the FCC carries out the role assigned it under the Act.

Finally, the concerns expressed by CLECs and ILECs alike that state commissions may skew the results of the fact-finding process to reach their own preferred policy outcomes warrant rigorous judicial review of important factual determinations such as whether a given UNE

^{82.} See Reiter v. Cooper, 507 U.S. 258, 268-69 (1993) (For a discussion of the primary jurisdiction doctrine); Allnet Communication Servs., Inc. v. Nat'l Exch. Carrier Ass'n, 965 F.2d 1118 (D.C. Cir. 1992).

^{83.} Local Competition Order, 11 F.C.C.R. 15,499, 15,563-64 (1996).

^{84.} See AT&T v. Southwestern Bell Tel. Co., No. A-97-CA-029-SS, slip op. at 6 (W.D. Tex. Aug. 17, 1998) (referring to the FCC an issue arising under the Act); Petition of MCI for Declaratory Ruling that New Entrants Need Not Obtain Separate License or Right-to-use Agreements Before Purchasing Unbundled Elements, *Memorandum. Opinion & Order*, 15 F.C.C.R. 13,896, 13,897 n.5 (2000) (resolving referred issue).

satisfies the "impairment" test,⁸⁵ or the level of costs incurred to provide a UNE.⁸⁶ Consistent with pre-Act precedent, federal courts have applied the relatively deferential "substantial evidence" or "arbitrary and capricious standards of review to factual determinations by state commissions under the Act.⁸⁷ Although not supposed to be "toothless," these standards of review have rarely resulted in reversals or remands of factual determinations by state commissions. Where evidence is fairly balanced, it is entirely appropriate to affirm the commission's finding of fact. Reversal or a least a remand, however, should result when the weight of the evidence is contrary to the commission's finding. Some weighing of evidence by district courts is necessary to ensure that the Act is applied uniformly and in a manner that is consistent with federal law and policy.

IV. CONCLUSION

The Telecommunications Act of 1996 "unquestionably" took from the states the regulation of local telecommunications competition.⁸⁸ In place of state regulation, the Act created the outlines of a national policy framework, to be completed largely by the FCC but then applied by state commissions to disputes between ILECs and new entrants. In practice, however, state commissions have assumed the role mandated by Congress for the FCC, resulting in substantial inefficiency and uncertainty, and threatening attainment of the Act's objectives.

Rather than cement or even accelerate this shift by deferring to legal and policy determinations of state commissions, federal courts should conduct the rigorous *de novo* review required by decades of precedent concerning federal review of state agency orders. In lieu of deference, the courts should refer to the FCC under the doctrine of primary jurisdiction those issues that cannot readily be resolved by application of the Act's text, its underlying purposes, FCC precedent or persuasive analysis of the foregoing by state commissions. Although *de novo* review of factual determinations by state commissions is not appropriate, the courts should ensure that those determinations are supported by the record and not a device for implementing the state's policy preferences.

For its part, the FCC should reaffirm and adhere to the commitment it made in 1996 to lead the evolution of federal

^{85.} See AT&T Corp. v Iowa Utils. Bd., 525 U.S. 366 (1999).

^{86.} See id.

^{87.} See MCI Telecomms. Corp. v. GTE Northwest, Inc., 41 F.Supp.2d 1157 (D. Or. 1999) (applying the substantial evidence test); U.S. West Communications, Inc. v. Jennings, 304 F.3d 950 (9th Cir. 2002) (Applying the arbitrary and capricious standard of review).

^{88.} AT&T v. Iowa Utils. Bd., 525 U.S. at 377-78.

telecommunications policy by issuing additional and revised local competition rules that would bind state commissions in arbitration and enforcement proceedings, and federal courts in reviewing state commission decisions. The FCC should also reissue its invitation to the courts to refer matters to it, and promptly resolve all such referrals. State commissions should be encouraged to actively participate in the FCC's proceedings. The FCC should seriously consider comments by state commissions addressed to the merits of particular issues, in light of the substantial experience they have accumulated in arbitration and enforcement proceedings, and their proximity to consumers. The FCC, however, and not the states, ultimately must resolve legal and policy issues arising under the Act.

INCENTIVES TO SPEAK HONESTLY ABOUT INCENTIVES:

THE NEED FOR STRUCTURAL REFORM OF THE LOCAL COMPETITION DEBATE

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INTRODUCTION

This essay marks the occasion of my fourth trip to Boulder to participate in one of Phil Weiser's justly celebrated conferences on the state of the telecommunications industry. I'm happy to report that all is well in the industry for lawyers, because the same basic arguments rage on in all the usual forums and show little sign of abating. All is well for academic commentators too, because the arguments that keep the lawyers busy are as theoretical and interesting as they are intractable.

The problem is that what is good for lawyers and academics is not necessarily good for the public at large. The very debates that prove so intriguing to telecommunications professors impose enormous costs on society as a whole. Those costs include not just the expense of all the lawyering about implementation of the Telecommunications Act of 1996 ("1996 Act"),¹ but also the more insidious costs that regulatory uncertainty inflicts on us all. For example, since the passage of the 1996 Act, participants in the greater telecommunications community lawyers, lobbyists, academics, economic consultants, and the like—have been arguing about whether it is appropriate to make incumbent local exchange carriers (ILECs) lease out to their competitors, at low regulated rates, all network elements needed for the provision of basic telephone service. This arrangement is known as the "unbundled network element (UNE) platform." We are no closer to a resolution of that question than we were in 1996. Indeed, as I write this, the FCC has just gravely

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^{1.} Pub. L. No. 104-104, 110 Stat. 56 (codified in scattered sections of 15, 18, and 47 U.S.C.).

exacerbated the problem by shifting the debate about the availability of the platform away from itself, as a unitary national decision-maker, to each of several dozen state commissions, which will be free to disagree with one another on basic regulatory questions—and ultimately to scores of federal district courts on appeal, which will undoubtedly diverge on those questions as well.²

The debate about the UNE platform and other such issues focuses on what I will call "first-order" incentives—the incentives that various regulatory measures are said to engender for telecommunications carriers in their capacity *as carriers*. When we argue about first-order incentives, we address such questions as whether the UNE platform gives CLECs the necessary incentives to develop a broad customer base before deploying facilities of their own, as the CLECs claim, or whether it simply undermines the incentives of incumbents and CLECs alike to invest in new facilities, as the incumbents claim.³

My objective in this essay is not to answer those questions about first-order incentives, but to shift the inquiry up a notch and focus instead on what I will call the "second-order" incentives of regulators and market participants to behave responsibly as political actors. Questions about second-order incentives take the following forms: When arguing about first-order incentives, does each side in a regulatory dispute have any incentive to imagine itself in the shoes of the opposing side and try to reach consensus? Or does each side perceive the dispute as a zero-sum game between eternal antagonists? Do *regulators* have adequate incentives to take extreme care in tinkering with the incentives of market participants? Will market forces hold regulators swiftly and publicly accountable when they misjudge the incentive effects of their regulations? Or will the consequences of those mistakes be difficult to trace back to particular regulatory decisions? Do regulators have incentives to disregard diffuse long-term costs in pursuit of more visible short-term benefits?

As discussed below, these questions about second-order incentives should be just as important to policymakers as the familiar questions about first-order incentives. This essay discusses two possible ways to repair broken second-order incentives: first, by relaxing the "successor or assign" provision of the 1996 Act⁴ to make it easier for incumbents to exit markets subject to excessive regulation; and, second, by permitting

^{2.} Report and Order, *Review of Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, etc.*, CC Dkt No. 01-338, at ¶¶ 179-196 (2003) [hereinafter *Triennial Review Order*].

^{3.} See United States Telecom Ass'n v. FCC, 290 F.3d 415, 424-25 (D.C. Cir. 2002) (USTA).

^{4.} See 47 U.S.C. § 251(h)(1)(B)(ii).

the merger process to create carriers that defy easy characterization as "incumbents" or "competitors." The details of these proposals, and the steps needed to ensure that they do not lead to re-monopolization of local markets, are less important than their common objective: to fix the broken second-order incentives of carriers and regulators and thereby replace today's climate of trench warfare with the welcome prospect of regulatory consensus.

I. THE BROKEN POLITICS OF TELECOMMUNICATIONS REGULATION

Much of the debate about telecommunications competition policy focuses on the question of what incentives carriers should be given, as carriers, to act in ways that promote the larger public interest. The FCC's pricing methodology, known as "TELRIC," is theoretically designed to give CLECs appropriate incentives to build new facilities when, and only when, doing so would produce greater social welfare than leasing existing facilities from incumbents.⁵ The "impairment" standard of section 251(d)(2)—which limits the network facilities subject to unbundling-is likewise said to preserve the necessary incentives of both CLECs and ILECs to invest in new, socially beneficial facilities.⁶ Section 271-the mechanism that keeps the largest ILECs, the Bell companies, from competing in the long distance market until they open their local markets to competition-is said to give those companies appropriate incentives to cooperate in the efficient provision of network facilities to their competitors.⁷ Performance assurance plans are said to preserve such incentives after section 271 approval is granted.8

Regulators are obviously right to focus on these sorts of incentive questions. The problem, however, is that massive uncertainty surrounds the question of exactly how all of these incentives should be calibrated. For example, at what point do the self-executing penalties in a performance assurance plan *over*deter ILECs and produce competitively biased windfalls for CLECs? At what point do the rates for network elements fall so far that incumbents and competitors lose appropriate incentives to build socially valuable new facilities? And by what measure should we define when it would be socially valuable, rather than wasteful and needlessly disruptive, for CLECs to duplicate existing facilities?

^{5.} See Verizon Communications, Inc. v. FCC, 535 U.S. 467 (2002).

^{6.} See USTA, 290 F.3d at 424-25; 47 U.S.C. § 251(d)(2).

^{7. 47} U.S.C. § 271; see AT&T Corp. v. FCC, 220 F.3d 607, 632-33 (D.C. Cir. 2000).

^{8.} See, e.g., Memorandum Opinion and Order, Application by Bell Atlantic New York for Authorization Under Section 271 of the Communications Act To Provide In-Region, InterLATA Service in the State of New York, 15 FCC Red. 3953, 3959, 4164-73 (1999), affd on other grounds by AT&T Corp., 220 F.3d 607.

Each of these questions has, at once, no answer and infinitely many answers. For example, the states have generated, all in the name of TELRIC, vastly different pricing regimes—*i.e.*, mutually inconsistent answers to the key incentive questions TELRIC is supposed to answer.⁹ As for the "impairment" inquiry, the FCC has delegated to the states some of the most basic questions about the optimal list of network elements subject to unbundling.¹⁰ The states sought that authority not just, or even primarily, to accommodate different *factual* circumstances from place to place, for the FCC could address those on its own, just as it has done in the pricing flexibility context.¹¹ To the contrary, the states wanted to experiment with mutually inconsistent *regulatory philosophie* —with warring intuitions about what incentives are needed to promote competition in the public interest.¹²

This state-by-state experimentation may have much to commend it from a purely academic perspective. One of Phil Weiser's key contributions to this field is his use of the "states as laboratories" concept as a rallying cry for greater "cooperative federalism" in the telecommunications context.¹³ But, from a practical perspective, widespread regulatory experimentation can carry enormous costs. First, by dispersing decision-making authority, it increases the costs of regulation and litigation—potentially by a factor of more than 50. As the FCC explained to the Supreme Court in 1998:

Congress did not intend for 50 state commissions to diverge on such basic federal issues as whether 'cost' means forward-looking economic costs or historical costs.... The question is whether the federal

[T]he reality is that the principal differences in the outcomes that will emerge from [delegating unbundling decisions to the states] will reflect not market variations but philosophical ones... Any process that involves individualized decisions by state commissions would inevitably give free play to [state policy] differences, and would create a patchwork of decisions on the availability of network elements that would reflect not the application of the congressional standards to different sets of facts, but the application of radically different standards that would subvert the national policy established by Congress.

402

^{9.} See AT&T Corp., 220 F.3d at 616 ("[E]normous flexibility is built into TELRIC.").

^{10.} Triennial Review Order, supra note 2, at ¶¶ 179-196.

^{11.} See, e.g., WorldCom, Inc. v. FCC, 238 F.3d 449 (D.C. Cir. 2001) (upholding FCC "pricing flexibility" regime).

^{12.} Ironically, AT&T—now a chief exponent of greater "states' rights" in the telecommunications context—put it best in 1999, when it still trusted the FCC more than the states to adopt pro-CLEC positions:

AT&T UNE Remand Reply Comments, CC Dkt. No. 96-98, at 57-58 (filed June 10, 1999).

^{13.} See Philip J. Weiser, Federal Common Law, Cooperative Federalism, and the Enforcement of the Telecom Act, 76 N.Y.U. L. REV. 1692 (2001); Philip J. Weiser, Towards a Constitutional Architecture for Cooperative Federalism, 79 N.C. L. REV. 663 (2001); Philip J. Weiser, Chevron, Cooperative Federalism, and Telecommunications Reform, 52 VAND. L. REV. 1 (1999).

courts will decide the parties' core substantive disagreements on the merits in a single proceeding on direct review of the FCC's rules or . . . in piecemeal [state-by-state] review proceedings under Section 252(e)(6) stretching well into the next century. The latter approach would inflict anticompetitive uncertainties and severe transaction costs Congress gave the Commission the rulemaking powers at issue here precisely because it wanted a smooth and expeditious transition to open competition, not a chaotic and dilatory one.¹⁴

The FCC's Chairman appealed again to this concern in 2003, but this time in dissent from his own Commission's decision to defer resolution of the UNE platform dispute to the varying discretion of the states:

I believe this decision will prove too chaotic for an already fragile telecom market.... The nation will now embark on 51 major state proceedings to evaluate what elements will be unbundled and made available to CLECs. These decisions will be litigated through 51 different federal district courts. These 51 cases will likely be decided in multiple ways—some upholding the state, some overturning the state and little chance of regulatory and legal harmony among them at the end of the day. These 51 district court cases are likely to be heard by 12 Federal Courts of Appeals—do we expect they will all rule similarly? If not, we will eventually be back in the Supreme Court of the United States to resolve any conflicts—the same Court that vacated our excessively permissive unbundling regime in 1999. This process will take many years and will hardly be the quieting and stabilizing regime that was so craved by a rocky market.¹⁵

The second reason that regulatory experimentation carries enormous costs brings us back to the question of incentives—and, this time, second-order incentives. All regulators, state and federal, confront

^{14.} Reply Br. for the Fed. Pet'rs at 16-17, AT&T Corp. v. Iowa Utils. Bd., 525 U.S. 366 (1999) (Nos. 97-826 *et al.*). The Supreme Court agreed:

[[]T]he question in these cases is not whether the Federal Government has taken the regulation of local telecommunications competition away from the States. With regard to the matters addressed by the 1996 Act, it unquestionably has. The question is whether the state commissions' participation in the administration of the new *federal* regime is to be guided by federal-agency regulations. If there is any 'presumption' applicable to this question it should arise from the fact that a federal program administered by 50 independent state agencies is surpassing strange.... This is, at bottom, a debate not about whether the States will be allowed to do their own thing, but about whether it will be the FCC or the federal courts that draw the lines to which they must hew. To be sure, the FCC's lines can be even more restrictive than those drawn by the courts—but it is hard to spark a passionate 'States' rights' debate over that detail.

AT&T, 525 U.S. at 378 n.6.

^{15.} Separate Statement of Chairman Michael K. Powell, Dissenting in Part, at 4, in *Triennial Review* proceeding (Feb. 20, 2003).

incentives to produce (or preserve) immediate and tangible benefits, even if doing so requires risking longer-term costs in industry stability. Examples of this phenomenon span the range of regulatory issues, including the glacial pace of access charge reform (particularly on the intrastate side) and an engrained reluctance to "rebalance" retail rates in the face of increasing competition.¹⁶ The incentive to favor short-term benefits over long-term stability is particularly acute where regulators can concentrate the benefits within their jurisdiction and disperse the longterm costs more broadly. For example, any given state may have an incentive to ratchet up the numbers for competition"—*i.e.*, UNEplatform competition—disparaged by the D.C. Circuit.¹⁷ To accomplish that end, the state might err on the side of keeping network element rates low and disputed elements (such as switching) on the statewide unbundling list.

At some point, such regulation carries serious costs, some (but not all) of which the states may hope to disperse beyond their boundaries. For example, artificially low wholesale rates or excessive enforcement penalties may threaten the financial health of the ILEC as a whole and its ability to perform the maintenance functions needed for basic network integrity, but those harms are borne throughout the incumbent's region.¹⁸

17. USTA, 290 F.3d at 424.

404

^{16.} See, e.g., Access Charge Reform, Sixth Report and Order, 15 F.C.C.R. 12962, 12965-74 (2000), aff'd in part and vacated in part on other grounds by Tex. Office of Pub. Util. Counsel v. FCC, 265 F.3d 313 (5th Cir. 2001); Application by Qwest Communications International, Inc. for Authorization to Provide In-Region, InterLATA Services in the States of Colo., Idaho, Iowa, Mont., Neb., N.D., Utah, Wash. and Wyo., Memorandum Opinion and Order, 17 F.C.C.R. 26303, 26543-44 (2002). Retail rates are "rebalanced" when regulators free an incumbent of obligations to provide some services below cost on the expectation that it will be able to recover above-cost rates for other services. The development of competition makes such implicit cross-subsidies unsustainable over the long term, because competitors will cherry-pick the customers that had been paying above-cost rates. See USTA, 290 F.3d 415, 422-23 (D.C. Cir. 2002); see also 47 U.S.C. 254 (laying groundwork for replacing implicit subsidy mechanisms with explicit tax-like scheme).

^{18.} The same is true of ruinous penalties that state commissions may seek to impose on ILECs for violation of their regulatory obligations. For example, with the encouragement of the Minnesota Department of Commerce, the Minnesota Public Utilities Commission gave serious consideration to fining Qwest \$75 million for "privately" negotiating special contractual terms with certain CLECs within Qwest's 14-state region, even though other state commissions within that region imposed no fine at all upon reviewing those same transactions. See Order Requiring Plan and Authorizing Comments, Complaint of the Minnesota Department of Commerce Against Qwest Corporation Regarding Unfiled Agreements, Dkt. No. P-421/C-02-197 (Minn. Pub. Utils. Comm'n Dec. 18, 2002), at 2; cf. Order Making Tentative Findings, Giving Notice for Purposes of Civil Penalties, and Granting Opportunity to Request Re-Hearing, AT&T Corp. v. Qwest, No. FCU-02-2 (Iowa Utils. Bd. May 29, 2002), at 17-18 (declining to issue fine so long as Qwest submitted certain agreements to Board). The Minnesota commission eventually imposed on Qwest both a \$25 million dollar penalty and other, non-monetary penalties. See Order After Reconsideration on Own Motion, Complaint of the Minnesota Department of Commerce Against Department of Commerce Against Qwest Corporation Periode Against Qwest Corporation Periode Against Qwest Corporation Periode Against Qwest Corporation Periode Against Quest Periode Periode Against Quest Periode P

At the same time, some costs of excessive wholesale regulation *are* specific to the state, such as the tendency of low network element rates to compromise incentives for ILECs and CLECs to invest in new facilities over the long term. But, again, those costs tend to reveal themselves only after a substantial period of time, and even then they are not easily attributed to misguided regulation.

These are examples of flawed "second-order" incentives: *i.e.*, the factors that can lead regulators—both state and federal—to miscalculate or simply disregard the incentive effects of their own regulations. The most pernicious of these may be the simple *absence* of adequate incentives to induce a regulator to exercise due care when deciding how or whether to regulate a given market. The consequences of mistaken regulatory decisions that the errant regulator is never held accountable for them—and is therefore free to focus on short-term objectives at the expense of long-term consumer welfare.¹⁹

Compounding this problem are the distorted second-order incentives of the regulated parties themselves: not as market actors, but as *political* actors that lobby regulators and legislators to turn the rules in their favor. These second-order incentives are obvious to anyone who has paid the slightest attention to the telecommunications debate in this country. For many years, that debate was characterized by trench warfare between evenly matched and mutually antagonistic "sides"—specifically, in the wireline context, between ILECs and CLECs. Because neither side believes that it will ever stand in the shoes of the other, neither side has any incentive to take seriously the regulatory concerns of the other. This intractable zero-sum game plays itself out in Congress, on the eighth floor of the FCC, in each of 50 state commissions, and ultimately in dozens of courts. The result is regulatory gridlock.

II. ELEVATING THE DEBATE THROUGH REFORM OF SECOND-Order Incentives

If we are to substitute sound telecommunications policy in place of seven years of political gamesmanship, we will need to do more than

Regarding Unfiled Agreements, Docket No. P-421/C-02-197 (Minn. Pub. Utils. Comm'n Apr. 30, 2003) at 12-13.

^{19.} Of course, this phenomenon is by no means confined to the world of telecommunications regulation. Most policymakers, in most contexts, have incentives to overweight the short-term benefits of their decisions and underweight any associated long-term costs. See, e.g., Michael Abramowicz, Speeding Up the Crawl to the Top, 20 YALE J. ON REG. 139, 158-159 (2003); Jonathan R. Macey & Geoffrey P. Miller, Deposit Insurance, the Implicit Regulatory Contract, and the Mismatch in the Term Structure of Banks' Assets and Liabilities, 12 YALE J. ON REG. 1, 18-19 (1995).

continue haggling about the right way to address the first-order incentives of carriers as market actors. We will also need to adjust the second-order incentives of regulators to regulate responsibly and of regulated entities to lobby responsibly. In this essay, I describe two possible ways in which we could help align those second-order incentives with the public interest. What follows is no more than an exercise in outside-the-box thinking; I harbor no illusions that either of these proposals will become reality, particularly the first. Nonetheless, whatever the merits of these specific examples, my larger point is that it is not enough to worry about the substance of regulation; we must also worry about the very form of regulation. What the telecommunications world needs is some systemic mechanism that would facilitate consensus by blurring today's distinctions between mutually antagonistic "sides" (e.g., ILECs v. CLECs)-and, specifically, by giving each side appropriate incentives to imagine itself in the shoes of the other.

A. Peremptory Strikes Against Overzealous State Regulators

One such mechanism would involve congressional relaxation of the "successor and assign" provisions of the 1996 Act. Under current law, if an ILEC sells its operations in a particular state to another carrier, that new carrier generally assumes the regulatory burdens previously shouldered by the ILEC itself.²⁰ One practical consequence is that, within the state, ILECs and CLECs view themselves as adversaries locked in eternal struggle: whatever is good for one is bad for the other. Because no CLEC would *want* to purchase an ILEC network subject to excessive wholesale regulation, particularly if the CLEC can simply live off of low UNE rates instead, neither the ILEC nor the CLEC has any incentive to worry about what would happen if their roles were suddenly reversed.

Now suppose that the "successor or assign" language in section 251(h) were relaxed so that not all regulatory burdens imposed on an ILEC are necessarily imposed on a non-ILEC purchaser of the network. In particular, suppose that Congress enabled each ILEC to exercise, in carefully defined circumstances, a "peremptory strike" against a particularly problematic state commission by selling its local exchange operations in that state to an unaffiliated carrier *without passing along all of the ILEC-specific regulatory obligations under section 251(c).* The scheme I imagine would take precautions to ensure that this limited right does not become a mechanism for re-monopolization of the local market: a game of musical chairs through which ILEC investors eliminate local

^{20.} See 47 U.S.C. § 251(h)(1)(B)(ii); see generally Ass'n of Communications Enters. v. FCC, 235 F.3d 662 (D.C. Cir. 2001).

competition rules simply by swapping their respective networks. For example, Congress could limit the exercise of "peremptory strikes" to one or two states per ILEC; it could limit the class of potential buyers to carriers that maintain substantial operations as CLECs in other states to ensure that they retain continuing incentives to behave like hybrid carriers rather than pure ILECs; and it could continue subjecting such CLEC buyers not just to the obligations of all LECs under sections 251(a) and (b), such as interconnection, but also to the most critical requirements of section 251(c), including obligations to unbundle legacy loop facilities and to permit collocation at the central office.

Suddenly, the ILEC's network would seem much more attractive to a potential CLEC purchaser. Likewise, the sale of that network would seem much more attractive to the ILEC itself *if* it is currently subject to a distorted set of regulatory obligations that seem to favor the interests of short-term UNE-platform competition over the long-term benefits of facilities investment and network integrity. Tweaking the "successor or assign" language in the 1996 Act would enable an ILEC, without incurring enormous losses on sunk investment, to move its business elsewhere if it concludes that UNE regulation in one or two of its states has made continued business in those states a losing proposition for any carrier subject to the full panoply of section 251(c)(3) leasing obligations.

That outcome would have several highly beneficial effects on the second-order incentives of regulators and market participants. First, it would make negotiations between ILECs and CLECs more constructive than the intractable zero-sum game that characterizes many of today's negotiations. For example, CLECs would perceive that they no longer derive straightforward advantages from regulation that systematically disadvantages ILECs, because at some point such regulation would induce ILECs to exit the market—and thereby deprive *all* CLECs of the ability to avail themselves of full-blown ILEC regulation under the 1996 Act. And even a CLEC contemplating the purchase of ILEC facilities would arguably have incentives to ensure sound regulation of the existing ILEC, because at least *some* of the rules adopted for that ILEC would subsequently apply to the CLEC if and when it purchases the network.

Just as important, this approach would create a market-based mechanism for correcting the incentives of regulators to engage in regulatory overkill when trying to ratchet up the numbers for UNEbased competition, no matter how politically attractive they may be. The market itself would hold those regulators accountable for excessive disregard for the long-term health of the network, because at some point too much regulation would drive ILECs out of the market and trigger the end of full-blown ILEC regulation. As noted, regulators ordinarily face perverse incentives to overweight the short-term benefits of

regulation and underweight the long-term costs, particularly when the latter are dispersed beyond their jurisdiction. Relaxation of the "successor or assign" rules would diminish the risks of such a state-bystate race to the bottom, because it would subject each individual state to the prospect of losing many of its current regulatory powers if it exercises them imprudently.

B. ILEC-CLEC Mergers

Now consider a second possible mechanism for correcting flawed second-order incentives, one that would not require congressional intervention: mergers between (i) one or more major ILECs and (ii) one or more major CLECs/long-haul transport carriers such as AT&T or WorldCom. Not long ago, the prospect of such a merger was "unthinkable," in Reed Hundt's familiar phrase.²¹ He reasoned:

When we evaluate mergers in communications markets, we need to determine whether the parties in question fall into the category of competitors that have been precluded from entering a market. It may aid clarity of thought to call firms precluded competitors instead of potential competitors when law, or the lack of pro-competitive rules, not inclination or capability, is the reason they have not yet become actual competitors. In any event, under potential competition theory and under our newly named 'precluded competition' theory, the result is essentially the same: an AT&T-RBOC merger is not thinkable.²²

But what a difference the industry's recent financial collapse has made for regulatory thinking on this issue. Citing the "utter crisis" in the telecommunications sector, Chairman Michael Powell told the financial community in July 2002 that "[t]here are plenty of doctrines in antitrust and competition policy that would take into consideration the duress and

408

^{21.} Reed Hundt, *Thinking About Why Some Communications Mergers Are Unthinkable*, Address to the Brookings Institution, June 19, 1997, *available at* http://www.fcc.gov/Speeches/Hundt/spreh735.html [hereinafter *Hundt Speech*] (last visited Oct. 8, 2003).

^{22.} Id. The competitive issues presented by an AT&T-RBOC merger are similar to those raised by so-called "convergence mergers" in other industries: e.g., between electric and gas companies in the power industry. See, e.g., Dominion Res., Inc. v. FERC, 286 F.3d 586 (D.C. Cir. 2002). Among those issues are threshold disputes about whether a given merger is properly characterized more as "horizontal" or "vertical," with all attendant consequences for the level of regulatory scrutiny they draw. See, e.g., Tim Brennan, "Vertical Market Power" as Oxymoron: Getting Convergence Mergers Right (Aug. 2001), available at http://www.rff.org/disc_papers/PDF_files/0139.pdf. Particularly if the merger has important horizontal components, the merging companies may be asked to divest assets to mitigate concerns about market concentration.

state of the market If a Bell company brought a deal to us, that would certainly be part of the consideration."²³

Of course, neither Chairman Powell nor anyone else seriously suggests that our nation's antitrust enforcers should simply step back and allow such mergers to happen without first scrutinizing the impact of consolidation on competition. Those antitrust authorities may consider asking the merging parties to divest certain assets within the ILEC's traditional service region as a precondition to formal regulatory authorization. For example, AT&T might well be expected to divest, to another capable CLEC, some of its operations within the traditional service territory of any Bell company merger partner.²⁴ That and other steps may sometimes be needed to ensure that such mergers do not impair the prospects for continued local competition within a Bell company's region. After all, no fair-minded person wants an oligopolistic partition of this industry into three or four regions, each dominated by a single carrier.

But, if these concerns are adequately addressed, imagine the consequences for the national telecommunications debate. How would it affect that debate if the largest CLEC in Verizon's territory were the combined forces of BellSouth and AT&T? Or if the largest CLEC in BellSouth's territory were the combined forces of Verizon and WorldCom?²⁵ I suspect that, instead of the wooden "us versus them" advocacy that now passes for a national telecommunications dialogue, we would hear a more nuanced and constructive debate and a much greater emphasis on regulatory consensus. That is because each of those carriers would have very substantial operations as an ILEC *and* a CLEC; none of them would be pigeonholed into the narrow industry role to which legacy regulation has consigned them. Put differently, ILEC-CLEC mergers would succeed in giving many of the major industry players a stake in seeing not just one side, but all sides, of any particular telecommunications dispute.

^{23.} Yochi Dreazen, FCC, Faced With Telecom Crisis, Could Let a Bell Buy WorldCom, WALL ST. J., July 15, 2002, at A1.

^{24.} See generally Memorandum Opinion and Order, In the Matter of Application of WorldCom, Inc. and MCI Communications Corp. for Transfer of Control of MCI Communications Corp. to WorldCom, Inc., 13 F.C.C.R. 18,025, 18,109-11 (1998) (noting merging companies' agreement to divest MCI's Internet backbone assets to assuage market concentration concerns); see also Memorandum Opinion and Order, Application of GTE Corp. and Bell Atlantic Corp. for Consent to Transfer Control of Domestic and Int'l Sections 214 and 310 Authorizations, etc., 15 F.C.C.R. 14,032, 14,037 (2000) (requiring divestiture of GTE's Internet backbone assets to avoid section 271 concerns).

^{25.} I cite these particular combinations only because the trade press has speculated about them. I have no more basis than anyone else for believing that they will actually happen. Nor do I have any basis for believing that they or similar mergers won't already have happened, or at least been announced, by the time this volume rolls off the old-economy presses.

That seismic shift in the second-order incentives for those carriers to behave responsibly *as political actors* could help break the current logjam in telecommunications regulation. Legislators and regulators would no longer confront a need to choose between mutually antagonistic "sides." Ironically, the civilizing effect of ILEC-CLEC mergers on telecommunications advocacy was a key consideration that led Reed Hundt to deem them "unthinkable." He asked rhetorically:

Could the RBOC join AT&T in pressing for its legal rights as an entrant out-of-region to be upheld at the FCC or in court, while arguing in the same forums against AT&T when the dispute concerned an in-region issue? To implement a competitive entry strategy in today's transition period, a new entrant has to be an aggressive, albeit reasonable, advocate in all venues—in the marketplace, in negotiations, in state regulatory proceedings, in front of the FCC, and in court. The entrant may not be always right and it may not always win, but its shareholders will expect it to be always aggressive.²⁶

Hundt's single-minded faith in the adversary system was understandable at the time, given his reliance on AT&T and other CLECs to help save his regulatory legacy in court after the initial success of the ILECs' challenges in *Iowa Utilities Board.*²⁷ But that faith seems quaint in retrospect: we now know, six years later, that too much entrenched adversity among warring camps leads to regulatory indeterminacy, not the inexorable triumph of reason. Perpetuating such adversity for the sake of "aggressive" advocacy seems especially counterproductive where, as in the telecommunications industry, the camps at issue are distinct primarily because regulation itself has made them so.²⁸

The 2000 merger between Qwest (a CLEC, Internet backbone provider, and long distance company) and US West (an ILEC) helps illustrate the subtle value that mergers between traditional adversaries can bring to the national policy debate. Immediately after the merger, Qwest surprised both ILECs and CLECs by taking novel middle-ground

410

^{26.} *Hundt Speech, supra* note 21.

^{27.} Iowa Utils. Bd. v. FCC, 120 F.3d 753 (8th Cir. 1997), *rev'd sub nom*. AT&T v. Iowa Utils. Bd., 525 U.S. 366 (1999).

^{28.} For example, the battle lines in many of today's regulatory disputes can be traced back to the 1984 consent decree that separated the Bell operating companies (today's largest ILECs) from AT&T (today's largest CLEC/long distance company). See generally 47 U.S.C. §§ 153(4), 271 (superseding decree but perpetuating these lines). In this respect, the "long distance market" is largely (though not entirely) a creature of regulation—and a threatened one at that, given the steady entry of local and long distance companies into each other's traditional markets.

positions on a variety of regulatory topics—from collocation²⁹ to UNE pricing³⁰ to intercarrier compensation³¹—that have traditionally divided the industry. Indeed, Qwest began its intercarrier compensation comments with an aspiration to neutrality through the wearing of many hats:

In a rational telecommunications world, a carrier would be just a carrier and a call would be just a call. But this is not yet that world. Legacy regulation, rather than any underlying market necessity, is principally responsible the balkanization for of the telecommunications industry into specialized carriers providing specialized services. The existing crazy-quilt of intercarrier compensation schemes reflects and reinforces these artificial distinctions among carriers, and it creates unavoidable opportunities for economically irrational, regulation-driven arbitrage. Owest's ambition, like the Commission's, is to shatter those artificial distinctions, and this proceeding is a critical step in the right direction. As an incumbent LEC, a CLEC, an [interexchange carrier], an Internet backbone provider, an [Internet service provider], and a wireless provider, Qwest transcends regulatory typecasting, and it appears here not as a representative of any particular industry segment, but as a representative of the industry as a whole.³²

Of course, Qwest's deteriorating financial condition, which culminated in the replacement in 2002 of original CEO Joe Nacchio with former Bell company executive Richard Notebaert, caused Qwest to scale back many of its out-of-region activities and focus on its core local exchange operations. In some respects, the company is now less "the new Qwest" than "the new US West." But this does not mean that

^{29.} E.g. Deployment of Wireline Servs. Offering Advanced Telecomms. Capability, *Fourth Report and Order*, 16 F.C.C.R. 15435, 15426 (2001) ("[W]e find Qwest's arguments in favor of [a pro-CLEC] approach to be persuasive in view of its market position as both an incumbent LEC and a competitive LEC."), *aff'd* Verizon Tel. Cos. v. FCC, 292 F.3d 903 (D.C. Cir. 2002).

^{30.} In its Supreme Court brief in *Verizon v. FCC*, Qwest, unlike the other Bell companies, did not directly challenge the FCC's use of forward-looking cost rather than historical cost as the national pricing standard; instead, it challenged the Commission's use of a particular species of forward-looking cost: TELRIC. *See* Brief for Respondent Qwest Communications Int'l, Inc. (June 8, 2001), Verizon Communications, Inc. v. FCC, 535 U.S. 467 (2002).

^{31.} In its filed comments, Qwest advocated universal bill-and-keep for all telecommunications traffic—including the access traffic from which the company, as ILEC throughout its 14-state region, currently derives substantial revenues. Qwest urged the FCC to "view with considerable skepticism any suggestion by incumbent LECs that bill-and-keep makes less sense for access traffic than for other kinds of traffic." Reply Comments of Qwest Communications Int'l, Inc., at 3, in *Developing a Unified Intercarrier Compensation Regime*, CC Dkt No. 01-92 (Nov. 5, 2001).

^{32.} Comments of Qwest Communications Int'l, Inc., *Developing a Unified Intercarrier Compensation Regime*, CC Dkt. No. 01-92, at i (Aug. 21, 2001).

ILEC interests inevitably swallow CLEC interests soon after any ILEC-CLEC merger: as Jim Chen has observed, the pre-merger Qwest never occupied anything approaching the market position of AT&T or WorldCom even in its pre-merger glory days.³³ Subject to appropriate competitive safeguards, the combination of Bell companies with robust CLECs—AT&T or a post-bankruptcy WorldCom—could well clear the path towards a more constructive and balanced telecommunications debate over the long term. The ensuing consensus on various issues might be bad for telecommunications lawyers like me, but it would be very good for the average American consumer.

III. CONCLUSION

As I mentioned at the outset, my central objective in this article is not to advocate the particular mechanisms I have cited as possible ways to bring greater consensus to the telecommunications industry. My objective is simply to underscore the need to create *some* such mechanism. The industry will continue to spin its wheels if we perpetuate, for another ten years, the same timeworn disputes about the first-order incentives of ILECs and CLECs *qua* ILECs and CLECs. To break the impasse on those debates, we need to focus on fixing the second-order incentives that have systematically distorted the perspectives of both regulators and industry advocates.

^{33.} See Jim Chen, The Magnificent Seven: American Telephony's Deregulatory Shootout, 50 HASTINGS L.J. 1503, 1548 (1999).

YEAR 2002:

THE YEAR OF THE TELECOM MELTDOWN

DALE A. OESTERLE*

Year 2002 saw an entire industry, the telecom industry, and it's supporting service industries embarrass itself.¹ There have been few episodes in the nation's business history that can compare. The railroad industries' scandal ridden year of 1873² is the only analogy that comes to mind that can rival the depth and scope of the telecom industry's mess in 2002. As books have been written about the railroad industry in the 1870s,³ so too will books be written about the telecom industry's meltdown in 2002.⁴

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^{1.} E.g., Colin Haley, 2002: Telecom's Trying Year, Dec. 26, 2002, at http://www.internetnews.com/ent-news/article.php/1561481; 2002 Will Be Remembered as the Year Executives Paid the Price for Cooking Their Books, SEATTLE TIMES, Dec. 29, 2002, at E1 (detailing the scandals of the year). See also Gretchen Morgenson, Telecom, Tangled in Its Own Web, N.Y. TIMES, Mar. 24, 2002, § 3, at 1 [hereinafter Morgenson, Telecom]; Gretchen Morgenson, From WorldCom, an Amazing View of a Bloated Industry, N.Y. TIMES, Mar. 16, 2003, § 3, at 1.

^{2.} In 1873, the Credit Mobilier scandal erupted. The Credit Mobilier diverted profits of the Union Pacific Railroad stockholders to an inside group run by Oakes Ames, a Congressman from Massachusetts, and to his congressional and business cronies. The scandal reached the Supreme Court of the United States and the Vice-President of the United States. The same year it was revealed that Daniel Drew, Jim Fisk and Jay Gould had been milking the Erie Railroad stockholders in a similar fashion and that Leland Stanford, Charles Crocker, Mark Hopkins and Collis Huntington had been bilking the Central Pacific stockholders. *See, e.g.*, THE RAILROADS: THE NATION'S FIRST BIG BUSINESS; SOURCES AND READINGS, (Alfred D. Chandler, Jr. ed., 1965); CHARLES FRANCIS ADAMS, JR. & HENRY ADAMS, CHAPTERS OF ERIE (1956) (market price of a state assemblyperson's vote was \$15,000).

One could also point to the electric component companies' price fixing scandal of 1960. See Richard Austin Smith, The Incredible Electrical Conspiracy, FORTUNE, April 1961 and May 1961.

^{3.} E.g., E. RAY MCCARTNEY, CRISIS OF 1873 (1935).

^{4.} There is one already. OM MALIK, BROADBANDITS: INSIDE THE \$750 MILLION TELECOM HEIST (2003). *See also* D. QUINN MILLS, BUY, LIE, AND SELL HIGH: HOW INVESTORS LOST OUT ON THE ENRON AND INTERNET BUBBLE (2002); ANDY KESSLER, WALL STREET MEAT: JACK GRUBMAN, FRANK QUATTRONE, MARY MEEKER, HENRY BLODGET AND ME (2002).

The telecom industry will survive and there are some indications that it is creeping back into investors' hearts.⁵ Nonetheless, it is worth a retrospective look at year 2002 to see what can be learned and to evaluate Congress's reflex response, the Sarbanes-Oxley Act of 2002.⁶ The Act has changed corporate practice; the regulatory compliance costs of running a publicly traded corporation are higher. Scattered parts of the Act will improve some management practices. But the seed of significant improvement in management practices has been planted and will be grown by market pressure from more savvy investors. A remarkable private market correction appears to have begun.

I. THE TELECOM 2002 MELTDOWN

The revelations of 2002 were the product of problematic events that had taken place over the previous three or four years. But we discovered the depth of the industry's problems in 2002. Global Crossing declared bankruptcy in January of 2002 and when WorldCom filed for bankruptcy in July that same year all the illusions of the industry's health were unequivocally shattered.⁷ No one was spared the pain. Stockholders, bondholders, employees, and local communities all took it on the chin.

The telecom mess unfolded in waves. The first wave was the stumble of telecom equipment makers such as Lucent Technologies and Nortel Networks.⁸ The second wave was the devastation of the long-haul carriers such as WorldCom, Global Crossing, and Qwest Communications. The third wave was the swoon of the overseas

414

^{5.} See Bret Swanson, The Tech Comeback is Real, WALL ST. J., July 1, 2003, at B2 (noting new residential broadband users; new standards for extending high capacity optical fiber closer to homes and businesses and new products from Microsoft and Apple). See also Steven Rosenbush, Light at the End of the Fiber?, BUS. WK., Dec. 9, 2002, at 86; Steve Rosenbush, Poorer, But Happy to Be Here, BUS. WK., Feb. 17, 2003 at 66; Brian Grow, Profits: Now That's More Like It, BUS. WK., May 19, 2003, at 98 (describing rebound of "battered tech and telecom).

^{6.} Public Company Accounting Reform and Investor Protection Act, Pub. L. No. 107-204 (codified as amended in scattered sections of 15 and 18 U.S.C.). Title VII of the Act is the Corporate and Criminal Fraud Accountability Act of 2002. Title IX is the White Collar Crime Penalty Enhancements Act of 2002. Title XI is the Corporate Fraud and Accountability Act of 2002 [hereinafter Sarbanes-Oxley].

^{7.} The definitive revelation was Steven Rosenbush, *Inside the Telecom Game*, BUS. WK., Aug. 5, 2002, at 34.

^{8.} The equipment companies were the canary in the coalmine as they suffered defaults in their customer financing agreements with service providers that foretold the failure of those providers. See Ronald Fink, Most Dangerous Game?, CFO MAG., Mar. 2003. See also Dennis Berman, Lousy Sales Forecasts Helped Fuel the Telecom Mess, WALL ST. J., July 9, 2001, at B1 (faulting wildly optimistic equipment industry forecasts that fueled Wall Street earnings guidance).

telecom giants such as Deutsche Telekom and France Telecom.⁹ The fourth wave was the spill over effects on the older telecom giants in this country, AT&T, Verizon Communications, and BellSouth.¹⁰ Finally, the wireless industry joined the plunge.

By the end of 2002, equity investors had lost \$2 trillion dollars of capital value, double the losses suffered in the dot-com crash and eight times the losses suffered in the savings and loan crisis of the late '80s.¹¹ Telecom companies had lost, by the end of the year, close to 95% of their total capitalization.¹² One-half a million telecom workers had lost their jobs.¹³ Hundreds of telecom companies were in bankruptcy¹⁴ and two rated as within the three largest bankruptcies in American corporate history.¹⁵ Telecom companies could not raise or borrow money and distressed companies could not sell assets, even at bargain basement prices.¹⁶ Telecom investment fell to less than 75% from its 2000 levels.¹⁷ 2002 saw a nine-year low in telecom venture capital investments and a 28-year low in telecom initial public offerings.¹⁸ Bank lenders still worry about tens of billions of dollars in exposed loans.

The enormity of the telecom collapse had three root causes. First, giant leaps in industry technology had fractured the market as participants raced to take advantage of the new developments. Excess expansion, failed expectations and overcapacity followed as they often

18*. Id*.

^{9.} Steve Rosenbush et al., *The Telecom Depression: When Will it End?*, BUS. WK., Oct. 7, 2002, at 66.

^{10.} Most of the old-world telecom companies invested heavily in the new technology companies. See Stephanie N. Mehta, Birds of a Feather; Who Wrecked Telecom? Critics Blame the Fledglings. But the Folks who Did the Most Damage Were Veterans., FORTUNE, Oct. 14, 2002, at 197.

^{11.} Rosenbush et al., *supra* note 9. *See also* Kevin Maney, *Future Not So Bright for Telecom*, MONEY, July 15, 2002, at 1B (S&L mess wiped out \$250 million in 2002 dollars). This number varies from \$1 trillion to \$4.6 trillion in the press. *See, e.g.*, James Alleman, *Telecommunications Stock Market Volatility: Impact on Industry*, Slide 3, 2002 (on file with author).

^{12.} Rosenbush et al., supra note 9.

^{13.} Id. See also Morgenson, Telecom, supra note 1; Dennis K. Berman, Dialing for Dollars: Before Telecom Industry Sank, Insiders Sold Billions in Stock, WALL ST. J., Aug. 12, 2002, at A1.

^{14.} By March of 2003, 24 of the largest 30 publicly traded telecom service companies were bankrupt. Fink, *supra* note 8. On July 1, 2003, a Wall Street Journal editorial noted that there had been 1,000 telecom bankruptcies since 2000. *See* Swanson, *supra* note 5.

^{15.} Among the bankrupt companies were Global Crossing, WorldCom, 360 Networks, PSINet, Williams Communications, XO Communications, Winstar, Genuity, and Net2000 Communications. WorldCom and Global Crossing ranked, at the time they were filed, as the world's first and third largest bankruptcies. WorldCom remains the largest, but Global Crossing has since slipped to fifth. *See* Rosenbush et al., *supra* note 9.

^{16.} See Maney, supra note 11 (Global Crossing found few takers for its 100,000-mile fiber network).

^{17.} Swanson, *supra* note 5.

have in the aftermath of a technology breakthrough.¹⁹ There was volatility in the business fundamentals.²⁰ Second, federal regulation was both heavy-handed and shortsighted.²¹ The Telecommunications Act of 1996 was built on false assumptions and spawned unintended consequences.²² As the FCC and, inevitability, courts tinkered with the act in endless hearings, legal uncertainty and variability induced yet more volatility into the market.²³ And finally, too many of the inside principals in the business were rogues and rascals. Fraud increased the stock market run up when people were duped and it increased the stock market decline when people learned the truth and lost trust. This essay focuses on the third cause of the collapse, the malfeasance.

Some of the worst security frauds in American history came to light inside telecom companies – Adelphi Communications, Metromedia Fiber Network, WorldCom, Qwest, Global Crossing, and Enron.²⁴ In

22. Rosenbush & Elstrom, *supra* note 21.

^{19.} E.g., Financial Turmoil in the Telecom Marketplace: Hearing Before the Senate Commerce, Science, and Transportation Comm., (July 30, 2002), (statement of Michael Powell, Chairman of the FCC) (describing "field of dreams" business models, price deflation and other problems of fast evolving new technology), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-224797A1.pdf. See also Paul Starr, The Great Telecom Implosion, THE AMERICAN PROSPECT ONLINE, Sept. 9, 2002, at http://www.prospect.org; Rosenbush et al., supra note 9, at 66. The automobile and communications industries went through a similar period after the invention of the internal combustion engine and the telephone.

^{20.} See Health of Telecommunication Sector: Hearing Before the House Energy and Commerce Comm'n, (Feb. 5, 2003) (statement of Robert C. Atkinson, Director of Policy Research-CITI Columbia University) (describing the "fundamental volatility" of the telecom sector), available at http://energycommerce.house.gov/108/Hearings/02052003hearing775/Atkinson1265.htm. See also Powell, supra note 19 (describing the need for regulatory reform); Simon Romero, At Telecom Research Firm, The Forecast is Never Sunny, N.Y. TIMES, Mar. 17, 2003, at C8 (describing a report of Probe Research).

^{21.} E.g., Steve Rosenbush & Peter Elstrom, 8 Lessons from the Telecom Mess, BUS. WK., Aug. 13, 2001, at 60 (criticizing the effect of the '96 Act). See also Goli Ameri, The Final Word on the Crash of the Telecom Market, TELEPHONY ONLINE, Aug. 26, 2002, at http://telephonyonline.com/ar/telecom_final_word_crash/index.htm TelephonyOnline.com; Goli Ameri, Adopting & Prospering in a Changing Telecom Market, available at http://www.siliconiran.com.

^{23.} Id. See also Atkinson, supra note 20 (describing legal "gridlock" effects on the telecom sector: "Everything became a single high-risk roll of the dice. Now, every FCC decision—because it has such far-reaching application—literally becomes a 'federal case' and leads not to finality but to litigation, with fundamental decisions being made not by an expert agency but by judges and their law clerks"); Powell, supra note 19 ("We are always buffeted by the winds that come blowing out of judicial judgments and litigation, which are constantly putting the commission back on its heel"). See also Steven Rosenbush et al., What Hath the FCC Wrought?, BUS. WK., March 10, 2003, at 38.

^{24.} Enron is not a telecom company but it did own a broadband subsidiary and promised videos on demand, a promise on which it did not deliver. Then CEO Jeffrey Skilling publicly touted the service and sold stock before the company acknowledged that the division had failed. Tyco Industries, another of the scandal-riddled companies in bankruptcy, also had a fiber optic subsidiary. One could, under a liberal classification, count both as also in the telecom industry.

the year 2002, 330 companies had to restate earnings, a twenty percent increase over any other year in American business history.²⁵ Most of the restatements, certainty the largest of them, came from telecom companies.

Worldcom is restating revenue in 2001 and 2002 of \$7.8 billion (and it may climb to \$11 billion,²⁶ which is greater than the Gross Domestic Product of Kenya in 2002²⁷). Worldcom is also taking writedowns of its goodwill of over \$80 billion, the largest in history.²⁸ The successor to WorldCom, whose 1999 to 2002 books are now known as the worst accounting and audit fraud in history, recently received the largest fine ever levied by the Securities and Exchange Commission (SEC), \$500 million.²⁹ Shareholders lost \$180 billion on the company's stock from its peak in 2000.³⁰

Some of the worst cases in American history of private aggrandizement by managers also came to light. Managers of failing companies sold stock as stock prices peaked and declined, collecting staggering sums of cash: Gary Winnick of Global Crossing pulled \$734 million out of a four-year-old company that never made a dime in profits.³¹ Philip F. Anschutz made over \$1.4 billion in Qwest. ³² Many of the "bubble beneficiaries" created business plans that raised investors' expectations to unrealistic levels and sold shares before reality set in;³³ others sold shortly before profit predictions were proved incorrect.³⁴ CEOs of telecom companies borrowed huge amounts from compliant

^{25.} E.g., Cassell Bryan-Low, *Heard on the Street: Restatements Rise 22%*, WALL ST. J., Jan. 21, 2002, at C3. (the 330 restatements in 2002 and 270 in 2001 were both all time records; there were, by comparison, only 116 restatements in 1997).

^{26.} Stephen Labaton, *MCI Agrees to Pay \$500 Million to Shareholders in Fraud Case*, N.Y. TIMES (National Edition), May 20, 2003, at A1.

^{27.} See POCKET WORLD IN FIGURES, (Economist, 2003), at 232.

^{28.} See Dana Cimilluca, WorldCom Finds New \$2b in Errors, SUN-SENTINEL (Fort Lauderdale), Apr. 1, 2003, at 1D. This is the 2002 GDP of Columbia. POCKET WORLD IN FIGURES, *supra* note 27.

^{29.} Deborah Solomon & Shawn Young, *MCI to Pay Investors \$500 Million: Fraud-Charge Settlement Follows Audit Scandal of Historic Proportion*, WALL ST. J., May 20, 2002, at A3. The previous single largest company fine had been \$150 million against Citigroup's Salomon Smith Barney.

^{30.} *Id.* at A13. This is approximately the GDP of Austria. *See* POCKET WORLD IN FIGURES, *supra* note 27.

^{31.} Rosenbush et al., *supra* note 9, at 34. His personal profit is larger than the GDP of at least eight of the world's countries (e.g., Bhutan, Burundi, Eritrea, Gabon, Gambia, Guinea-Bissau, Liberia, and Sierra Leone). POCKET WORLD IN FIGURES, *supra* note 27.

^{32.} See David Leonhardt, Bubble Beneficiaries, N.Y. TIMES, Aug. 25, 2002, § 3, at 10. See also Gretchen Morgenson, Getting While the Getting was Good, N.Y. TIMES, Mar. 24, 2002, § 3, at 1.

^{33.} Leonhardt, *supra* note 32.

³⁴*. Id*.

boards. Bernard Ebbers borrowed \$400 million personally from WorldCom that he can never pay back.³⁵

Telecom executives also were at the center of questionable stock deals with other companies. They took early stage ("friend of the company") stock in suppliers that did deals with their own.³⁶ They abused questionable tax shelter strategies.³⁷ And they took preferred positions in hot IPOs on the understanding that they would direct their company's business to the investment bankers doing the underwriting ("spinning").³⁸ Most of the sweetheart deals were not disclosed to shareholders.³⁹ And there were the excessive salaries: cash, bonuses and stock options netted Kenneth Lay, for example, nearly \$153 million in the year leading up to the companies collapse.⁴⁰

Some of the worst abuses came as telecom executives struggled to delay the public's realization that their companies could never deliver on their revenue promises. Using questionable or downright misleading accounting practices, the executives preserved the illusion of stability as they cashed in their options and their stock.⁴¹ In the first six months of

37. Ken Brown & Rebecca Blumenstein, *Sprint Garnered Tax Benefits From Executive's Use of Options*, WALL ST. J., Feb. 13, 2003, at A1 (Sprint's two top executives fired for using questionable tax shelters); Simon Remero, *For Sprint Chief, a Hard Fall from Grace*, N.Y. TIMES, Feb. 12, 2003, at C1.

^{35.} Rosenbush et al., *supra* note 9.

^{36.} Gretchen Morgenson, *Deals Within Telecom Deals: For Companies, Contracts. For Executives, Stock*, N.Y. TIMES., Aug. 25, 2002, § 3, at 1 [hereinafter Morgenson, *Deals*]. The value came in a variety of forms: Sometimes it was warrants or options given in exchange for an established executive's participation on an upstart company's advisory board. Other times it was in initial offering shares designated by the issuer as part of the allotment destined for so-called friend and family. In still other cases executives were allowed to buy convertible preferred shares at bargain-basement prices when the company was still private; the shares were converted into common just before an IPO. Most of the deals were unseen from shareholders of either the telecom purchasing company or the upstart supplier.

^{38.} Morgenson, *Deals, supra* note 36, at 10. *See also* Rosenbush et al., *supra* note 9, at 35 (Grubman doled out shares in hot IPOs to telecom executives); Kevin Maney & Noelle Knox, *Failed Start-Up Landed Among Scandals's Debris*, USA TODAY, Dec. 19, 2002, at IB (describing the spinning of Rhythms stock); Peter Larsen, *Rhythms' Debut and the Corporate Blues*, FIN. TIMES (London), Sept. 1, 2002 at 21.

^{39.} Morgenson, *Deals, supra* note 36, at 10,

^{40.} SEATTLE TIMES, *supra* note 1. For examples of insider sales, *see* Berman, *supra* note 13 (e.g., insiders in a now-defunct wireless-data provider, Metricom Inc., where yearly revenues never exceeded \$18.5 million managed to sell off more than \$35 million in stock).

^{41.} Rosenbush et al., *supra* note 9, at 37; Berman, *supra* note 13. For a case study, consider the actions of Catherine Hapka at Rhythms NetConnections. Maney & Knox, *supra* note 38. Rhythms raised \$1.8 billion in capital by 1999 and by 2001 the company was bankrupt. It never showed a profit. When the company went public in 1999 the stock traded at \$69 a share; the IPO price was \$21. Hapka sold \$12 million in stock in 2000, mixing statements of unbridled optimism with statements of caution. In September of 2002, after a Hapka conference call to analysts, the stock traded at \$46. In February of 2001, the company reported a 2000 loss of \$568 million; its shares traded at \$1. Hapka resigned on May 1, after collecting a final \$680,000 bonus despite leading the company to the brink of bankruptcy.

2001, for example, Qwest sold \$857 million worth of network capacity to Global Crossing and other carriers and bought \$450 million worth of capacity from those same carriers.⁴² The swaps raised Qwest's revenue an additional 5% for the first half of the year,⁴³ yet the swaps were in capacity in largely unused lines.

Those in the service industries also made out like bandits, while turning their heads to the industry's problems. Jack B. Grubman, an industry analyst at Solomon Smith Barney, wrote rosy reports on struggling companies and made \$20 million a year.⁴⁴ Audit companies charged up to \$25 million for yearly audits, overlooked blatant questions in the numbers and collected up to an additional \$25 million a year in consulting fees for other services.⁴⁵ Law firms collected sizable fees for overlooking and, in some cases, creating legal shams and schemes.⁴⁶

It was, all and all, a sorry spectacle. The industry fell under the spell of some very shady characters. Some were crooks, others fell from grace trying to keep pace with the crooks, and others, who overlooked the artifice, just were along for the ride. In any event, we now watch the news for the indictments and see the lawyers of those who have not copped a plea all claim their clients were innocent, that they did not know and were duped by others. Some will never be indicted; some who are indicted will walk; and a few, a very few, will go to jail.

Those who study financial swindles in world history see predictable cycles and patterns. With a cool eye the historians claim that swindles are linked to prosperity, increase with financial distress, and precipitate a crash when revealed. Professor Kindleberger of MIT, for example, wrote in 2000 that

The stock sank to \$0.19. Hapka had sold her shares for an average price of \$21 a share. Once in bankruptcy, bondholders got 12 cents on the dollar and stockholders nothing.

^{42.} Rosenbush et al., *supra* note 9.

^{43.} Id.

^{44.} For a discussion of Grubman's practices, *see id.* Grubman reiterated his "strong buy" recommendation on WorldCom all through 2001 and in early 2002 and did not downgrade the company to a "neutral" until April 22, 2002, when the company had publicly announced that it was slashing its revenue targets for 2002 and shares had dropped 90% form their peak to \$4 a share. *See also* Maney & Knox, *supra* note 38 (Grubman's role in touting Rhythms NetConnections). Grubman's practices and those of other telecom security analysts were the basis of a huge settlement agreement between ten large Wall Street brokerage operations and the State of New York and the SEC. For a description of the \$1.4 billion settlement, see Stephen Labaton, *10 Wall St. Firms Settle With U.S. in Analyst Inquiry*, N.Y. TIMES, April 29, 2003, at A1; Gregory Zuckerman & Susanne Craig, *Wall Street's Payout: Too Little and Late?*, WALL ST. J., Apr. 29, 2003, at C1.

^{45.} E.g., Richard Breeden, Manager's Journal: The Chaperone, the Referee, and the Confessor, WALL ST. J., Apr. 1, 2002, at A12 (discussing the consulting fees of auditors; Mr. Breeden is a past chairman of the SEC).

^{46.} *E.g.*, Douglas McCullan, *Legal Ease*, WALL ST. J., Aug. 14, 2003, at A12 ("[lawyers] made millions helping Enron and other corporate malfeasors with their schemes to dupe investors").

Swindling is demand-determined . . . In a boom, fortunes are made, individuals wax greedy, and swindlers come forward to exploit that greed. The position is occasionally expressed elsewhere that sheep to be shorn abound and need only the emergence of effective swindlers to offer themselves as sacrifices . . . Greed not only creates suckers to be swindled by professionals but also pushes some of the amateurs over the line into fraud, embezzlement, defalcation, and similar misfeasance

Let us grant that swindling grows with prosperity. It increases further in financial distress from ... prices that stop rising and begin to decline ... When the swindle or embezzlement is revealed, distress is increased, often precipitating crash and panic.

Financial distress leads to fraud, so that the burden of losses can be dumped on others. If the market goes decisively the wrong way, for example, bucket-shop operators abscond

The last half of the 1990s was sufficiently prosperous in the United States to produce a bumper crop of scam, swindles, fraud, or actions of bad judgment or ethical ambiguity.⁴⁷

Even so, there are levels of degree among swindles. And year 2002 has to be a high water mark for financial scandal.

What sets the 2002 telecom meltdown apart from other financial scandals is its *depth*, the pervasiveness of the scams across numerous, high profile companies in the telecom industry, ⁴⁸ its *breadth*, the aid and support of the auditors, investment banks, securities analysts, rating agencies, media pundits and lawyers,⁴⁹ its sheer dollar *size*, and its *variety* in the types of scams perpetrated. There are many forms of financial malfeasance: The obvious ones—theft, misrepresentation and lying—and practices closer to, but still over the line—diversion of funds from a stated use to another; paying dividends out of capital or loans, dealing in company stock on insider information, selling securities without full disclosure of new information, using company funds for noncompetitive purchases from or loans to insiders, taking orders but not executing them, altering the company's books, corrupting independent auditors, analysts or media, using political influence to derail investigations and so on. In the year 2002 one could find examples of all of them.

^{47.} CHARLES P. KINDLEBERGER, MANIAS, PANICS, AND CRASHES 76-77, 85 (4th ed. 2000). Professor Kindleberger retired as the Ford Professor of Economics at MIT.

^{48.} See Morgenson, *Telecom, supra* note 1 ("As [securities regulators] dig, they many discover a trait that distinguishes this financial mess form other: the role played by an extensive web of relationships among these companies.").

^{49.} Id. See also Mehta, supra note 10 ("Telecom is the most incestuous industry anywhere.").

II. CONGRESS'S RESPONSE TO THE FRAUD: THE SARBANES-OXLEY ACT OF 2002

Congress's response to the corporate corruption and fraud slice of the telecom meltdown was to pass the Sarbanes-Oxley Act of 2002.⁵⁰ Congress passed the Act in some haste.⁵¹ The spectacular failure of Enron in late 2001 prompted the Senate and House to pass competing bills on corporate and securities industry reform. The Senate's bill was somewhat tougher and the drafters had trouble reconciling the bills in the conference committee. The WorldCom scandal broke in June of 2002 and the renewed political pressure on Congress to respond kicked the bill out of conference committee and on to the President's desk by July 30th of that year.

The haste, urgency, and moral outrage attached to the legislation produced limited debate and a blizzard of reform proposals.⁵² Some of the reforms overlapped. There are overlapping provisions on CEO and CFO certifications, on internal accounting control systems, and on whistleblower protections. Some of the reforms, added in the heat of the moment from the floor of the Senate, were not subtle or nuanced – the blanket prohibition on loans to executives, for example.

But the Act served its political function: President George W. Bush when signing the Act on July 30th, 2002, declared that there would be "no more easy money for corporate criminals; just hard time."⁵³ His words were tough and angry. He noted that "[i]n the aftermath of September 11th, we refuse to allow fear to undermine our economy, and we will not allow fraud to undermine it either." He attributed the need for the legislation to "corporate corruption" that "has struck at investor confidence, offending the conscience of our nation." He referred to the Act as the "most far reaching reforms of American business practices since the time of Franklin Delano Roosevelt." Under President Roosevelt, Congress passed the Securities Act of 1933 and the Securities

^{50.} Sarbanes-Oxley, *supra* note 6.

^{51.} For the legislative history of the Act *see* WILLIAM H. MANZ, CORPORATE FRAUD RESPONSIBILITY: A LEGISLATIVE HISTORY OF THE SARBANES-OXLEY ACT OF 2002 (William H. Manz ed., 2003).

^{52.} The Senate passed the Act without a dissenting vote, the same margin that passed our anti-terror legislation after 9/11. The House passed the act by a vote of 423 to 3. The overwhelming Congressional support stands in stark contrast to Congresses legislation a year earlier that had reduced the fees on SEC filings and legislation in the 90s that had reduced the SEC's budget and otherwise blunted the SEC's efforts to change accounting practices. Richard B. Schmitt, Michael Schroeder & Shailagh Murray, *Corporate-Oversight Bill Passes, Smoothing Way for New Lawsuits*, WALL ST. J., July 26, 2002 at A3.

^{53.} Press Release, President George W. Bush, Signing Statement of George W. Bush (July 30, 2002), *available at* http://www.whitehouse.gov/news/releases/2002/07/200207030.html.

Exchange Act of 1934. The '33 Act required the registration of public offerings of securities and the '34 Act created the Securities and Exchange Commission, the federal agency that regulates the securities industry, brought our national exchanges under its control, required the licensing of broker-dealers, and made securities fraud and manipulation a federal crime.

Selected high points of the bill are:

- The creation of an independently financed Public Company 1. Accounting Oversight Board and an independently financed accounting standard setting board;⁵⁴
- A requirement that principal executive officers to certify their 2. periodic reports to the SEC;⁵⁵
- A requirement that public companies put in place disclosure 3. controls and procedures that provide assurance that the company's managers have all the information needed to accurately complete the firm's annual and quarterly reports;⁵⁶
- A requirement that insiders must report their trades in firm stock 4. within two days;⁵⁷
- A prohibition on "personal loans" to corporate officers;⁵⁸ 5.
- 6. A penalty for corporate officers of companies that must restate disgorge earnings-they must their incentive related compensation;59
- New criminal statutes on a "scheme or artifice to defraud" and false 7. certifications;60
- Increased disclosure requirements for pro forma financials, off 8. balance sheet transactions, senior management codes of ethics and "material correcting adjustments";61
- 9. New rules designed to eliminate the conflicts of interest of research analysts;⁶² and
- 10. Asks federal agencies to report on nine aspects of securities practices - on audit rotation; consolidation of auditing firms; credit rating agencies; aiding and abetting liability; SEC enforcement actions; investment banks; special purpose entities; principles based accounting; and sentencing guidelines.

^{54.} Sarbanes-Oxley Act of 2002 § 101, 15 U.S.C. §7211(2002).

^{55. § 302.} See also 18 U.S.C. §1350(a)-(b) (1934 Act filings must be accompanied by CEO and CRO certifications of compliance with sections 13(a) and 15(d) of the 1934 Act).

^{56.} Sarbanes-Oxley Act of 2002 § 404, 15 U.S.C., §7262 (2002). 57. § 403, 15 U.S.C. § 78p.

^{58. § 402, 15} U.S.C. § 78m, k.

^{59. § 306.}

^{60.} E.g., 18 U.S.C. §§ 1341, 1343, 1348 (2002).

^{61.} Sarbanes-Oxley Act of 2002 § 401, 15 U.S.C. § 78m (2002).

^{62. 15} U.S.C. § 780.

Many of the provisions require SEC rule-making to implement the requirements and prohibitions.

Several commentators are claiming that the Act is more show than substance.⁶³ Many of the prohibitions were already in place, either expressly or implicitly, in pre-existing rules. Others, including myself,⁶⁴ argue that new rules affect stock prices in developed countries much less than believed by the pundits and that more aggressive, competent and better funded enforcement of basic anti-fraud rules is what is required to change corporate practice and culture and restore investor confidence.⁶⁵

They have found that in countries with developed economies and mature stock markets, such as the United States, a change in governance rules does not correlate with a change in stock prices. In emerging markets, such as South Korea, increases in the regulation of corporate governance do positively correlate to stock prices, but the correlation is absent in the United States.

Id.

See also Dale A. Oesterle, *Illusions of Board reform*, DAILY CAMERA (Boulder), May 6, 2002, Business Plus Section, at 2:

Reform minded government leaders and officials of our major trading markets, led by eager academics, have proposed a quick fix. Reform the structure of the board of directors of our publicly traded companies.

Mandate that every corporation have board subcommittees that oversee executive compensation and hiring, that nominate directors and that oversee the work of independent auditors. Staff those committees with independent, outside directors, directors not otherwise connected with the management of companies. Compensate those outside directors exclusively with stock and stock options. These subcommittees, the reformers tell us, will tie the managers' incentives more closely to their shareholders' long-term interests.

This is heady stuff. It is also wrong. Academic studies have shown there is no link between the number of independent directors and firm performance. Indeed, to the extent that there is a correlation between board structure and performance, those firms with fewer independent directors do better!

Folks also forget that Enron's audit committee was composed of independent directors, including an ex-business school dean of a top ten school and the wife of a Senator. Our major exchanges, at the prodding of the Securities and Exchange Commission had, in 1999, required audit committees with a majority of independent directors and required (and this speaks volumes) that at least one of the subcommittee members could read a set of financials.

Id.

65. See id.:

Our existing rules, developed over a century, already prohibit most significant types of manager fraud. Tinkering with the rules will not produce major changes at the margin in the definition of prohibited conduct.

^{63.} See, e.g., Lawrence Cunningham, Sharing Accounting's Burden: Business Lawyers in Enron's Dark Shadows, 57 BUS. LAWYER 1421 (2002). See also Joann Lublin et al., How Real are the Reforms?, WALL ST. J., July 29, 2002, at B1.

^{64.} Dale A. Oesterle, *Can Rule Changes Restore Confidence in Markets?*, DAILY CAMERA (Boulder), Nov. 18, 2002, Business Plus Section, at 2 (citing studies):

[[]T]here is a substantial question over whether a change in the legal rules on corporate governance will affect the markets. Scholars have, for the past several years, been studying correlations between stock prices and corporate governance rules and practices.

All agree, however, that the Act will add significant administrative expense to corporate management. A recent study found that the Act had increased legal costs of 32 publicly held companies by, on average, a whopping 90%.⁶⁶ The Act will also materially change corporate board structure and the power relationships among corporate officials. The Act gives more power and responsibility to outside directors.⁶⁷

Outside directors must spend more time on company oversight, must have more expertise, and will demand more compensation;⁶⁸ in short, the Act will professionalize the outside director position. Fewer will be qualified to be outside directors and fewer of those qualified will want the position due to the increased personal exposure to liability.⁶⁹

The Act also gives more power and responsibility to audit committees, creating the audit committees as an independent power base inside the firm. The chairperson of the audit committee will be a new position of considerable power inside any company.

Finally, the Act will increase a company's overall dependency on legal counsel, who will become ubiquitous, counseling managers on procedures implemented in a wide array of contexts for minimizing the board's risk of liability. In response to the CEO and CFO certification requirement, for example, lawyers have designed certification plans that branch out and down from the CEO to all a company's divisions and major operating units; plant supervisors on up are now certifying their figures and the certifications telescope and compound, level by administrative level, up to the CEO.

The most important new rule in the Act, on standards of conduct, is the prohibition on loans to insiders, added at the last minute from the floor of the Senate. Corporations had abused the privilege of using such loans as a supplement to compensation and Congress took the right away. The rule, however, has no exceptions and will stop many routing compensation practices as well as abusive loans. Executives will no

Id.

Real changes come in the enforcement of existing rules against fraud and in a readjustment of the corporate culture. And the former will produce the latter. In sum, to the extent that government can affect investor confidence, it will likely be in the funding and empowerment of enforcement officials.

^{66.} Tamara Loomis, *For Public Companies, a High Price for Compliance*, NAT. L. J., May 12, 2003, at 18 (the average costs close to doubled from \$1.3 to almost \$2.5 million).

^{67.} The NYSE has adopted new stock exchange listing standards that, in some cases, exceed the standards of the Act. The listing standards, for example, require that independent directors comprise a majority of any listed corporation's board of directors. See, e.g., Stephen M. Bainbridge, *A Critique of the NYSE's Director Independence Listing Standards*, 30 SEC. REG. LAW J. 370 (2002).

^{68.} See Loomis, *supra* note 66 (directors' fees have doubled since the Act).

^{69.} *Id.* (supply of directors has shrunk since the Act).

longer be able to enjoy the cash-less exercise of compensatory stock options, for example. 70

An early survey of 137 CFOs and managing directors, an admittedly skeptical group on the Act, finds that while nearly 85% said that the Act has changed the control and compliance practices in their companies, one-half of those responding said that the Act itself will have no impact on pubic confidence.⁷¹ Only one-third of those surveyed believe that the Act will bolster investor confidence.⁷² Only 9% of the group believes that the Act is a good and adequate response to problems in accounting and reporting.⁷³ Thirty-three percent said the law was a good "first step"; 15% said that the legislation is "ill-considered and hastily passed."⁷⁴ Forty-two percent said that though the Act is a "well-meaning attempt" that the Act will impose unnecessary costs on public companies.⁷⁵

There are several deeper regulatory themes in the Act. First, the Act further federalizes control over the management structure of publicly traded firms.⁷⁶ With the passage of the Act, states lost a fair amount of control and influence over the practices of publicly traded firms. Second, the Act invigorates SEC enforcement actions; but Congress has shown that it is more willing to get involved in the details of corporate practice (on loans to officers, for example) and reclaim some of the discretion it has historically ceded to the SEC. Finally, the Act shows a return to structural and process regulations and less trust of conduct based regulations.⁷⁷ By structuring boards, board committees, information processes within firms, structuring analysts' independence, and requiring senior manager certificates, Congress believes it can increase the likelihood of ethical business conduct. The Act thus builds on and expands the model of the Foreign Corrupt Practices Act of 1977.

As a general public condemnation of poor corporate practice and an exhortation to prosecuting officials to catch the crooks, the Act serves its purpose. On the issue of whether Congress and to some extent the SEC have designed efficient and effective corporate governance procedures, I

^{70.} In the basic cash-less exercise procedure, the company loans an executive the strike price of an outstanding option, the executive exercises the option and sells the underlying stock, paying back the loan from the sale proceeds.

^{71.} Loomis, *supra* note 66 (19% expect a moderate impact, 9% expect a small impact, and 3% anticipate a major impact).

^{72.} Janet Whitman, Sarbanes-Oxley Begins to Take Hold, WALL ST. J., March 25, 2003, at C9.

^{73.} Id.

^{74.} Id.

^{75.} Id.

^{76.} E.g., Stephen M. Bainbridge, *The Creeping Federalization of Corporate Law*, REGULATION MAG., Spring 2003, at 26.

^{77.} There is also conduct regulation (loans, improper influence over auditors) in the Act.

am less sanguine. Even if superior when designed, the procedures will ossify and stagnate over time and policy makers will have difficulty removing or amending them. With strong conduct based rules against fraud, effectively enforced, firms will develop governance procedures (and change them over time) that insure compliance with the conduct based standards that will work better than the government designed structures and procedures.

There may even be a downside to these new structural and procedural requirements for corporate boards. The standards may bog down directors with regulatory checklists, leaving them with less time for the more critical task of advising and critiquing top management on straight business decisions. Enron, for example, satisfied all the new board structural requirements in 2001.⁷⁸ This hyper attention to procedural details may not create what we really need, a change in the mindset of the corporate director.⁷⁹ Our problem is not structural but social; boards need to shed themselves of group-think, dissent needs to be encouraged and not regarded as a breach of etiquette, rolodex boards with fellow CEOs, social and business contacts, and sports or political celebrities need to be disbanded in favor of boards of cross-benchers.

III. MARKET SELF-CORRECTION

The value in the 2002 Act may be not in its detail but in the Act as a market signal. The Act is an unequivocal declaration that the public is profoundly unhappy with the business ethics of American business in general and the telecom industry in particular. This signal, as well as the signals given off by sagging stock prices, may stimulate a market-based correction, that is, voluntary business practice improvements in response to investor pressure.

Those who remain in the telecom industry now have very strong incentives to prove to investors, consumers, creditors, potential employees and others that they are not like WorldCom and Global Crossing. The telecom meltdown then could be a real opportunity for telecom companies to distinguish themselves with innovative internal restructuring, an opportunity that did not exist during the '90s boom.⁸⁰ If so, we should expect savvy telecom companies searching for new capital to voluntarily experiment with governance changes in an effort to restore

^{78.} Overheard at a conference among Chief In-house Legal Counsel was the dry comment that the Act did not mean that we should use Enron as an example.

^{79.} See generally, Note, The Good, the Bad, and Their Corporate Codes of Ethics: Enron, Sarbanes-Oxley, and the Problems with Legislating Good Behavior, 116 HARV. L. REV. 2123 (2003).

^{80.} There was no need; money was flowing to all telecom companies.

confidence in their bone fides. As the markets reward some internal reforms and ignore others, companies would gravitate towards changes that have a real impact on corporate conduct.

Some companies have already sought to distinguish themselves willingly by higher levels of voluntary disclosure,⁸¹ by adopting liberal accounting practices such as expensing options,⁸² or by using different executive incentive plans (requiring longer holding periods for compensatory stock or options, for example).⁸³ Another voluntary effort to attract investor confidence could be the simple expedient of removing all firm specific anti-takeover devices and waiving all applicable state anti-takeover statutes. By doing so the firm's managers signal their intention to run the firm as well as any potential takeover management team might. Firms could also voluntarily make deep structural changes. Firms could, for example, empower their largest shareholders to select the firm's auditor or to put a competing slate of candidates for the board of directors on a firm's proxy card.⁸⁴

Investor services, such as Institutional Shareholder Services (ISS),⁸⁵ have created corporate governance ratings that seem to affect the

A stockholder thus has no choice among candidates in 99.9% of the board elections. Only when a dissident shareholder group seeks control in "proxy fight," and mails a separate, different colored proxy card, is there a choice. And the dissident group, usually losers, must foot a whopping bill, \$2 million and up, for the costs of its own mailings.

The CEO controls who gets on the firm's proxy and seats are usually held for one year. Upset the CEO and a director is not on next year's ballot. Just ask former Hewlett-Packer director Walter Hewlett. If a firm has a nomination committee to select directors, the members of the nomination committee are in favor with the CEO.

A firm could voluntarily put in another system that would allow, for example, a firm's largest shareholders to put up alternative candidates for the board. If the largest shareholder declines, the next largest could have the honor, until the shareholdings are less than, say, 1%, or until the top ten have declined.

85. Institutional Shareholder Services is the world's leading provider of proxy voting and corporate governance services. Located in Rockville, Maryland, ISS provides proxy research, voting recommendations and governance advisory services to financial institutions and corporations worldwide. Founded in 1985, ISS has satellite offices in New York, Chicago, London, Toronto, Manila, and Tokyo. The ISS explains its rating service as follows: "Ratings are calculated on the basis of eight core categories, including: 1) board of directors, 2) audit, 3) charter and bylaw provisions, 4) takeover practices, 5) executive and director compensation, 6)

^{81.} E.g., Holman W. Jenkins, Jr., Business World: One CEO's War for Investor Confidence', WALL ST. J., July 3, 2002, at A11.

^{82.} See Howard Stock, FASB Formally Adopts Study on Expensing Options, INV. REL. BUS., Mar. 24, 2003 (noting Coca-cola's voluntary practice).

^{83.} See Amy Borros & Dean Foust, A Battle Royal Against Regal Paychecks, BUS.WEEK, Feb. 24, 2003, at 127 (describes abandoning compensatory options in favor of restricted stock).

^{84.} As all stockholders asked to vote on proxies know, there is only one slate of candidates on the firm's proxy. A stockholder can vote yes for each candidate or abstain. She cannot vote no (unless state law recognizes the vote), nor can she vote for another candidate, nor can she write in another candidate. This one slate proxy solicitation card is permitted by express SEC rule.

investment practices of large institutional shareholders.⁸⁶ They call the rating a Corporate Governance Quotient (CGQ). We can expect that this and other ratings systems, now fairly crude, will mature as correlations between performance and corporate structure and practices are chronicled and integrated into the scales.

These market driven changes may offer more hope in the long rule than the protections in the Sarbanes-Oxley Act.

IV. CONCLUSION

The telecom mess has largely run its course and played out. As for those who made obscene gains while dumping the burden of losses on others, they followed the cynical directions of Jonathan Swift, commenting on the infamous South Sea Bubble:

Get money, money still And then let virtu follow, if she will.⁸⁷

qualitative factors, 7) ownership, and 8) director education." Available at http://www.issproxy.com/pdf/cgq_corporate_issuers_5_14_. The score for each core topic reflects a set of key governance variables. The current list comprises 61 of these sub-issues. In addition, "some variables are reviewed together under the premise that corporate governance is enhanced when selected combinations of these variables are adopted." *Id.* For example, a board with a majority of independent directors and all-independent key board panels (audit, nominating and compensation) receives a higher rating for each of these attributes than it would if it had either one of them in isolation. *Id.* The CGQ scores, which appear on the front page of each ISS proxy analysis, are provided to ISS institutional clients as an enhancement to its current research service.

^{86.} E.g., Prudential Research Cites Corp Governance Ratings, Reuters News Service, Apr. 2, 2003.

^{87.} KINDLEBERGER, *supra* note 47, at 80. Kindleberger gives the last word to Balzac: "The most virtuous merchants tell you with the most candid air this word of the most unrestrained immorality: 'One gets out of a bad affair as one can." *Id.*

REGULATION AND FREE MARKETS:

HOW TO REGULATE THE TELECOMMUNICATIONS INDUSTRY IN THE NEW ECONOMY

JAMES CROWE*

Although it may not be immediately obvious from my resume, I've spent the last 25 years trying to make a living at the intersection of business and government. Specifically, first as government deregulated power,¹ then as government deregulated telecommunications.² Over that time, I've been associated with companies that have dealt with and been directly affected by regulatory bodies in every state, in Washington D.C., in the EU, and in the countries of Northern Asia.³ This means that I am friends with a lot of lawyers. It also means I have a point of view concerning the right kind of model of regulation for the new economy. Whether that point of view has merit, I'll leave to you, but I do have an opinion.

Before I get to it, I think it's useful to provide some context-both historical and some current and important trends in our industry. Let's start with some history. In communications, for the past century, the history of the industry meant the history of American Telephone and Telegraph Company known as the Bell System. At the time of its breakup in the early '80s, it was the world's largest monopoly and it had one million employees.⁴ I remember reading that, at that time, AT&T

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^{1.} See Energy Policy Act of 1992, Pub. L. No 102-486, stat. 2776 (1992) (Act deregulated the electric power industry).

^{2.} See Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified as amended in scattered sections of 47 U.S.C.).

^{3.} Available at http://www.level3.com/603.html.

^{4.} AT&T had 1,009,000 employees at the time of its divestiture into the 8 entities known as the Regional Bell Operating Companies (RBOC's). AT&T, A Brief History, available at http://www.att.com/history/history4.html.

touched the average American seven times a day, more often each day than the federal government.⁵

It wasn't always a monopoly; it started as an innovative upstart. J.P. Morgan and Theodore Vail built the behemoth.⁶ Vail was brought in at the turn of the century to put some discipline in an unruly company. He was a business genius as well as a confirmed monopolist. As Vail's writings make abundantly clear, he viewed competition as barbarous and unruly; and he set out to systematically eliminate it from his industry.⁷ At that time, the situation was almost completely the reverse of today. Competition in the local phone business was vigorous, almost a free-for-all. Cities had two, three, or four competing phone companies. However, there was only one effective long distance company, AT&T Long Lines.⁸

Long distance service had become a necessary service for those who wished to remain competitive; this fact was not lost on Vail. He began to correct the effects of pernicious competition in an effective and rather brutal way. He used refusal to interconnect his long distance monopoly with competing local phone companies to force them to sell out at bargain prices.⁹ J.P. Morgan helped by cutting off competitors' access to the capital markets.¹⁰ Vail began his campaign just as one would expect, in the larger, more lucrative markets-the major cities-and worked his way across the country.

^{5. &}quot;AT&T is a corporate state, a Super Government if you will, whose presence in the United States is felt more keenly on a daily basis than even that of the federal government." JOSEPH C. GOULDEN, MONOPOLY 9 (G. P. Putnam's Sons, 1968).

^{6.} In 1939 N.R. Danielian described the Bell System as "a seething conglomeration of cells, ever active, ever expanding, ever expanding. In their ensemble, they make up a living organism, reaching out to take and control new fields, new industries, new sources of profits. In a true sense, this organism is a state within a state, exhibiting all the economic and political propensities of a national state in its most imperialistic moods." N. R. DANIELIAN, AT&T 379 (Vanguard Press 1939).

^{7. &}quot;It is believed that the telephone system should be universal, interdependent and intercommunicating, affording opportunity for any subscriber of any exchange to communicate with any other subscriber of any other exchange ... It is believed that some sort of a connection with the telephone system should be within reach of all ... It is not believed that this can be accomplished by separately controlled or distinct systems nor that there can be competition in the accepted sense of competition." ALVIN VON AUW, HERITAGE & DESTINY: REFLECTIONS ON THE BELL SYSTEM IN TRANSITION 5 (Praeger Publishers 1983) (quoting AT&T's 1910 Annual Report); "What we wanted to do was get possession of the field in such a way that, patent or not patent, we could control it." JOHN BROOKS, TELEPHONE: THE FIRST HUNDRED YEARS 83 (Harper & Row 1975).

^{8. &}quot;But AT&T's real ace in the hole in its battle with the independents was its steadfast refusal to interconnect. Bell, of course, had all the long distance lines except for comparatively few. .." BROOKS, *supra* note 7, at 114.

^{9.} Id.

^{10. &}quot;When the word leaked out that an independent telephone company was in trouble, Bell's ally, Morgan, who effectively controlled commercial credit, needed only to cut off that company's money supply to force it to the wall. Then AT&T would make an offer for the company's stock; thus the company would fall easily into Bell control. ..." *Id.* at 132.

As an aside, in the early days of local competition RBOC executives sometimes accused my first company, MFS, of cream skimming, since we began business in the larger metro areas. Whenever that occurred, I would take out a map showing the service areas of the RBOCs versus the independent telecommunication companies (telcos). As you know, they are largely concentrated in the big cities, because AT&T began as an unabashed cream skimmer. In any event, Vail continued to force local telcos to sell out with hardball tactics until the trust-busting federal government finally intervened.

In 1913, AT&T agreed to discontinue its local phone purchase in return for a de facto monopoly in its then current local phone areas and in long distance.¹¹ It was around this time that Vail's master stoke occurred. Unlike the big oil and steel monopolies, he actually embraced government, embraced regulation in return for monopoly. It is only idle speculation, but it is interesting to think what might have happened if Vail had resisted regulation and AT&T had been broken up like the other trusts. Households with phones grew explosively when local competition flourished at the end of the 18th century and slowed markedly when telecommunications became a monopoly in most markets.

From the time AT&T achieved its monopoly it systematically went about defending it with all the considerable means at its disposable, often assisted by regulators who became convinced by Bell System economists that telecom was a natural monopoly. At the end of the 1930s the newly created FCC was struggling to understand the already enormous entity it was seeking to regulate. It hired an economist by the name of Danielian to assist in developing a rational regulatory framework.¹² After intense study, Mr. Danielian reported that the FCC's difficulties were caused by an improper assessment of the fundamental nature of the phone giant. He said that the FCC attempted to understand AT&T as an economic entity when in reality it was a political organization that like most political entities, sought to maintain and extend its sphere of control.¹³

^{11.} In order to avoid antitrust litigation, AT&T agreed to divest itself of Western Union, cease aggressive acquisition of competing telephone companies, and to offer independent local providers the ability to interconnect with the long distance bell system. This agreement became known as the "Kingsbury Commitment" because of a letter sent to the U.S. Attorney General by Nathan Kingsbury. *See* Letter from Nathan C. Kingsbury to Attorney General J.C. McReynolds (Dec. 19, 1913) reprinted in 1913 AT&T Annual Report.

^{12.} Danielian published a book detailing the activities of AT&T and his recommendations for regulating the telecommunications industry. *See* DANIELIAN, *supra* note 6.

^{13. &}quot;In a larger view, the Bell System is a political organization of the first magnitude. Its methods of control, its means of expansion, its relations with government and the public, are fundamentally political in nature. In fact, even its price policies and investment of funds follow the pattern of political behavior." *Id.* at 400.

[Vol. 2

That characterization is aptly applied to many of our major phone companies even today.

It was about this time that today's regulatory framework was developed. Then and today it was aimed at universal service, meaning both AT&T and regulators viewed achieving affordable access to local voice phone calling by all Americans as a central mission.¹⁴ Note that I said local voice phone calling, not long distance. At that time, society was much more oriented around local community and long distance was a luxury. The urban areas were where wealth was concentrated; rural meant poor, and the suburbs of today did not exist. Subsidies were constructed that were aimed at achieving affordable local calling by pricing long distance and local service in urban areas above cost, and rural local calling below cost.¹⁵ And that system of regulation and subsidy has largely survived to the present. It is a system that overprices urban local calling.

So what? We have the best communications system in the world. It is changing, maybe slowly, but that is appropriate given the enormity of the industry. So what is the problem? To a certain extent, I agree, we do have a great system. Like students and businesses, government and regulators are correctly graded on a curve, on that basis we are doing rather well. But we can and should do much better.

Today, urban is no longer synonymous with rich. Needy residents of our inner cities overpay. I have an acquaintance who is quite wealthy; he owns a wonderful fishing camp in Wyoming. Qwest is forced to provide him local service at a hugely subsidized price because of a system that is no longer appropriate. Today, subsidies are buried in an arcane accounting construct managed by de facto local monopolies in a way that makes it impossible to determine what funds are subsidizing service, inflating profits or is simply waste caused by too many years of too little competition. All this is caused by a system that is no longer appropriate or necessary.

Many in this room and in state and federal government understand these problems, many of which are currently being addressed. However, there is another less well-understood and very important effect of 100

^{14. &}quot;The effective government policy was the implementation of universal service and value-based pricing under regulatory oversight. The PUC's were to ensure that AT&T and the independents extended service to all." JEFFREY E. COHEN, THE POLITICS OF TELECOMMUNICATIONS REGULATION: THE STATES AND THE DIVESTITURE OF AT&T 56 (M.E. Sharp 1992).

^{15. &}quot;Station-to-station theory had a beauty to those interested in promoting universal service. By requiring AT&T Long Lines, the company's long distance unit, to add to its operating costs part of the local loop, AT&T's profits fell. Simultaneously, the local operating companies could deduct those parts now being paid for by AT&T. The resultant reductions in local operating costs could then be passed on to the local subscriber in the form of lower rates, thereby encouraging universal service." *Id.* at 57.

years of rationalized monopoly, an economic distortion that affects a critical part of the US economy. To understand this enormous and pernicious economic distortion, I will turn to a discussion of the broader industry of which communications is a part-Information Technology (IT).

Information Technology is fundamental to our economy and it is fundamental to our national security. It is my belief that to understand where the role of communications in our economy and to develop a proper regulatory framework, it is necessary to understand communications in the context of its role as part of IT. To do that, we'll look at the basic economics of each of the component technologies of IT, which are simply the three things we do with information: processing information or computing, storing information on chips, magnetic or optical media, and moving information or communications

The price performance improvement rate of computing and storage has been incredible, doubling every 18 months. At that rate, you can buy one million times as much computing and storage per dollar as in 1970. In comparison, the price performance of telephone communications has been static over the same period until recently, circa 1995. Long distance dropped in price less than 10% per year and local service pricing has actually increased. Why? I believe the answer to this question is key to developing any kind of rational regulatory policy for communications going forward. It's not differences in technology. The technical underpinnings of computing, storage, and communications are similar. In fact, many of the technologies used in computing and storage came from communications companies and institutions like Bell Labs.

I believe the differences are in the fundamental ways in which the markets for the components of IT have developed. Take the technical standards development processes. These technical standards are called protocols. Protocols ensure that parts of a system work together, that hardware and software can be combined in networks. An example is a rail system. The curve radiuses, the track gauge, the wheel configuration, and the car sizes are all part of a rail system protocol. Telecommunications networks work the same way. In computing and storage, technical standards are set in the market. It's messy, risky and very fast. In communications, until very recently, a central planning process set standards. Companies argue about the future, publish standards and then the hardware and software is produced. It's elegant, predictable, and glacially slow. This same central planning applies to pricing and to capital allocation. In effect, we continue to view communications, wrongly in my view, as a slow moving utility industry.

This view has distorted investment on a massive scale. We process and store information cheaply with incredible new technology, but still

move it the way we did years ago. To prove the point, what's the cheapest way to move information? By truck! We distribute computing and storage to the point of use instead of centralizing and getting economies of scale and moving information to the point of use. At the office, companies spend enormous amounts on hardware and software when all they really want is to own information about transactions and customers. At home, we all must deal with complicated ways to store and process info. Some obvious examples are software and computers. The not so obvious examples are VCR's, DVD's, CD's, Books, Newspapers, Cable, and Satellite.

This situation created one of the great arbitrage opportunities in history. The dam broke sometime around 1995, as the result of two complimentary technical developments. One was the Internet and IP technology. The other was optical technology. Neither of which came from the traditional communications industry. Both advances came from startups; IP from companies like BBN, Cisco, Netscape and Microsoft. Optical from Ciena, JDSU and more recently from numerous venture funded startups.

Both technologies are market based and not centrally planned. IP improves at the same rate as computing, about 50% per year. Optical technology is improving at an unprecedented rate, maybe doubling every nine to twelve months or twice the rate of computing. The result is that technology makes it possible for properly designed communications networks to have price performance improvement that makes computing look slow—maybe 90% to 120% per year. That's twice the rate that computing and information storage has historically improved. The result is a tsunami that is swamping the old order and bringing incredible new opportunity.

This means that communications, networking, and connectivity, and I might note regulation of the same, will be where action is. To start with, look at what the effect will be on existing information distribution. The more expensive older means of moving information will give way. In the home, information means entertainment. Today information is distributed by car, truck, ship, and airplane networks in the form of books, newspapers, CD's, videotapes DVD's, etc. These media will move, quickly or slowly, in fits and starts, to IP / optical networks.

At the office, this means more and more outsourcing of processing and storage of information. Maybe you've heard the term ASP, it simply means a company that sells that processing over a network. This is a long-term trend; I remember when most businesses and governments ran their own long distance systems, now it's outsourced. The same thing will happen to data processing and storage. But the longer term picture is harder to see.

A caveat, technology development is not smooth. It is punctuated by unexpected, disruptive inventions, and capital markets or regulation can slow it. However, it is perhaps possible to anticipate the shape of the likely change. We have spent the last hundred years building a network serving our ears. The next several years are going to be about our eyes.

This is difference of kind. Humans are visible animals, 99.5% of the information comes from eyes. This means that the time will come when it is possible to interact with the information at a distance with a quality approaching actual physical presence. To give some sense, we have 12 conduits. We are lighting 4 fibers, 432 are commercially available. If we filled all conduits, 5,184 fibers, and lit at 10 Gigabits at 160 colors we could support maybe 30 telepresence sessions. At today's prices, that's a half-billion dollars per month. I'll sell it to anyone who would like it.

We calculated that at 60% price performance improvement, it would take 25 years before it would become affordable. It is an exciting development and means that the world will be smaller place. It would allow physical boundaries to mean less and communities of interest to mean more. It certainly means that enormous improvements in productivity, like the kind we have begun to see here in the US.

I believe the lessons for those who set policy are clear. First, communications is not a utility industry with long asset lives, slow product development, and is most certainly not a natural monopoly. It is the vital third leg of the IT tripod and it is a leg whose development has lagged due to central planning, embraced and encouraged by entrenched incumbents. Second, innovation comes from competition. It is rarely the companies who dominate one technology era that break new ground and usher in exciting new developments. The faster the pace of change, the more we need the entrepreneur backed by risk capital. The faster the pace of change, the more we need to resist those who defend de facto monopolies on whatever grounds.

Today, it is particularly important not to forget the importance of new innovative companies. Some may say that the number of failures, some very public and no doubt difficult for those involved, diminishes the importance of startups and competition to IT. While these are certainly difficult times, they will pass. I believe the fundamental trends I have discussed will continue as will the role of competition and innovation created in large part by new companies. But competition and regulation are not mutually exclusive. The answer, as some would say, is not simply to immediately loosen the fetters of burdensome regulation and let the free market work. Competition is not the terminal forest of economics, that is, the species of economic organization that inevitably crowds out all others if well enough is left alone.

In fact the lessons of history are clear, market leaders often achieve monopolies especially in technology industries, where a 6 or 12 month lead can mean an overwhelming cost and price advantage. Networking industries like rail or air transportation are especially susceptible to monopolization by incumbents who simply refuse to interconnect with competitors. Communications is especially difficult since it is a networking industry and it is an industry moving inexorably from a utility financial model to a technology one, where asset lives are short and investment is high.

It is an industry with over one hundred years of rather intense regulation; most of it applied to a single monopoly whose divested parts retain essential monopolies in local markets. So what is a regulator to do when too much regulation leads either to irrelevance as technology moves too quickly to be pinned down, or to economic distortions of the kind I just described; and too little regulation leads to damaging monopolies.

I said I had an opinion, well here it is in the form of guidelines for regulation of the new economy. Regulation is to fast moving technology industries as garlic is to cooking, use it sparingly. Governments should not interfere unnecessarily with the operation of free markets or the introduction of innovative technology. The primary goal should be as little regulation and as much free market as reasonably possible. I think a new model of regulation is needed. One formed around the notion that the universe of entities in communications can be divided into two categories: users or consumers and service providers.

The difference between the two is one of privilege and responsibilities and degree of regulatory oversight. Users are just that, users. Regulators and policy makers should ensure that all users have access to certain basic services. Defining the scope of these basic services is the domain of policy makers, not the industry. For my part, I believe that today it goes beyond local voice service. I am deeply concerned about the growing gap between those who have access to the digital world and those who are left behind.

Two interrelated matters should distinguish service providers. First, providers should be required to interconnect on a fair, nondiscriminatory basis and at cost. In return for the benefit of interconnection, service providers should be required to contribute to and participate in the provision of basic service. Except for monopolies, no company would be required to accept service provider status or accept basic service obligations. However, the privilege of interconnection should only be provided to those who do. Funds for basic service should be collected in a fair, open, and competitively neutral way. Those who

elect service provider status should have access to public and private rights-of-way on a fair non-discriminatory basis.

In general, the FCC and state regulators should move, over time, to oversight of industry self regulation of interconnection, funding, and provision of basic services. Since the industry does not have a history of such self-regulation, this should be a careful and cautiously managed process, but when it matures it provides a much more efficient and effective result. No distinction should be made between service providers based on the type of service or technology employed. It seems increasingly obvious that to do so only creates distortions. Communications by circuit, by packet, wireless or wired should be treated equally. Limited regulation is necessary to prevent firms from abusing a dominant position or monopoly control of essential facilities. Bottleneck firms controlling essential facilities should provide access to them on reasonable, transparent, and non-discriminatory terms. Essential facilities should not be owned or controlled by vertically integrated firms that abuse such control to maintain a dominant position by thwarting competition from other potential users of the facilities. Where the record is clear that firms have abused essential facilities, divestiture is the only effective remedy, period.

Regulators should provide a rapid, cost-effective mechanism to resolve disputes between market participants, especially those involving a dominant firm. I realize that many of these recommendations will require significant changes to a century old legal/regulatory regime. I realize that some are political third rails. However, the stakes are high, over the long term our national economic welfare and or security depend on us getting it right. I look at the past and the progress we've made-at times halting and convoluted, but real progress nonetheless, and it gives me optimism about the future. Thanks for the chance to give you my thoughts.