

THE INTERNET AND PORNOGRAPHY:
WHAT IF CONGRESS AND THE SUPREME COURT
HAD BEEN COMPRISED OF TECHIES IN 1995–1997?

*Cheryl B. Preston**

2008 MICH. ST. L. REV. 61

TABLE OF CONTENTS

INTRODUCTION.....	62
I. TIMES WERE TOUGH FOR TECHNO-POLITICAL KNOW-HOW IN 1995, 1996, AND FROM 1995–1997	64
A. The Information-Aged in Congress	65
B. The Information-Aged in the Court	68
II. AS IT SHAKES OUT	69
A. Lemonade from Lemons.....	70
1. <i>A Little Longer on the Range</i>	70
2. <i>Naked Women as Carrots</i>	73
B. Or Just Lemons.....	74
1. <i>The Sellout</i>	75
2. <i>A Better Mousetrap</i>	77
a. What Happened to PICS?.....	78
b. Over 6,500 Ports in 1995.....	82
3. <i>The Sexual Abuse of Information</i>	83
a. More	83
b. Easier	85
c. Better (Or Worse?)	86
4. <i>ICANN and the Hot Potato Toss</i>	88
III. THE RISKS OF WORKING DIRECTLY IN STONE	90
IV. CONCLUSION: WHAT DOES THE ENVIRONMENT TELL US ABOUT THE FAILURE TO REGULATE?.....	101

* Edwin M. Thomas Professor of Law, J. Reuben Clark Law School, Brigham Young University; Visiting Professor, S.J. Quinney School of Law, University of Utah. I sincerely thank Debra Linford Peck, J.D. 2007; Marin Turley Bradshaw, J.D. 2006, for her assistance with this project.

INTRODUCTION

Although the origins of the Internet date back to the 1960s,¹ the Internet did not become open to commercial and mainstream use until after October 1992, when the National Science Foundation lifted its ban on uses other than military and government research.² Just as ordinary folks began using the Internet, the Communications Decency Act (CDA), which was part of the Telecommunications Act amendments, was reported out of committee in July 1995.³ This stab at protecting children in the new cyber-playground was one of the first serious attempts to regulate the people's Internet. At that moment in time—a critical juncture in the birth of the information technology society—legislators made choices that have caused, and will likely continue to cause, significant ramifications in the course of digitizing human culture. In December 1995, less than four-tenths of a percent (or 16 million) of the world's population used the Internet.⁴ In December 2007, twenty percent (or 1.319 billion) were Internet users, and the total number of users is expected to grow to 1.650 billion by 2010.⁵

In spite of what might have been noble congressional intentions, the CDA was awful. When it imploded, some doors were closed, and some were opened. This Article explores the possible ramifications of these questions: what if the 104th Congress and the U.S. Supreme Court that dealt with the CDA had been more tech-savvy? Would Congress have written a

1. See Barry M. Leiner et al., *A Brief History of the Internet*, <http://www.isoc.org/internet-history/brief.html> (“The first recorded description of the social interactions that could be enabled through networking was a series of memos written by J.C.R. Licklider of MIT in August 1962 discussing his ‘Galactic Network’ concept.”).

2. Dan L. Burk, *Trademarks Along the Infobahn: A First Look at the Emerging Law of Cybermarks*, 1 RICH. J.L. & TECH. 1 (1995), available at <http://www.richmond.edu/~jolt/v1i1/burk.html> (“There was little opportunity for commercial Internet traffic in the days of government sponsored research usage. Indeed, the NSF promulgated an acceptable use policy (‘AUP’), forbidding such use of the publicly-funded Internet backbone connections.”). The Scientific and Advanced Technology Act of 1992, signed October 23, 1992, authorized the revision in the National Science Foundation’s (NSF’s) AUP to permit public use of NSF supported networks. See Scientific and Advanced-Technology Act of 1992, 42 U.S.C. § 1862 (2000); see also Ethan Katsh, *Bringing Online Dispute Resolution to Virtual Worlds: Creating Processes Through Code*, 49 N.Y.L. SCH. L. REV. 271, 276-77 (2004) (discussing how the Internet began to enter the mainstream only after the NSF permitted commercial activity on the Internet in 1992).

3. Communications Decency Act of 1996, Pub. L. No. 104-104, 110 Stat. 133. The portions of the Act that were found constitutional were codified as amended at 47 U.S.C. § 230 (2000).

4. Internet World Stats: Usage and Population Statistics, Internet Growth Statistics, <http://www.internetworldstats.com/emarketing.htm> (last visited May 13, 2008).

5. *Id.*

better, tighter statute, or none at all? Would the Court have framed its analysis differently, even if it ultimately ruled that the CDA was unconstitutional? What sorts of technological advancements might have been allowed to flourish, and what sorts would have stalled? How might the lives of members of the Net Generation played out differently?

Although “real” answers to these questions, if such answers even exist, will not be known for decades or longer, we may begin assessing the price, or the payoff, of the scarcity of Internet understanding in high political places from 1995 to 1997. This Article considers both the positive and negative ways that the crash of the CDA, as well as Congress and the Supreme Court’s understanding of the Internet at the time, may have influenced subsequent technological, legal, and social developments involving the World Wide Web. Ultimately, I hope to begin to frame the issues and develop an agenda for the research that may someday be critical in understanding this juncture in history.

Part I explores what we can assume about Congress and the Supreme Court’s Internet knowledge from 1995–1997. Part II considers arguments, in Section II.A, that the failure of the CDA was beneficial to the Internet and society. Section II.B considers arguments that the failure of the CDA cost us dearly in terms of what we value most. Part III raises the question of whether the lack of Internet exposure and technological vision resulted in at least one piece of First Amendment jurisprudence that cannot fully withstand the light of later events. I conclude that inaction has consequences. The irony may be that by leaving the Internet “wild and free,” the events of these early years might have vastly complicated the work that must now be done.

Inaction has consequences. As the Internet Frontiersmen argue, the Internet is comparable in many ways to the Wild West, especially the public commons of federal land. Professor Robert Keiter, a Western resources specialist, reminds us:

The federal estate, encompassing roughly 670 million acres[,] . . . [is] [a] wash in valuable natural resources, . . . and [it has served] more recently as a last bastion of wilderness. Western states and communities have long looked to the public lands for their economic sustenance. . . . [P]ublic land law and policy have evolved . . . [and] Congress, agencies, and courts have faced an array of antagonistic interests, each intent on establishing their own agenda as the dominant model for federal resource management.⁶

During the 1787–1891 period, “the nation embraced a disposal policy designed to promote settlement and development . . . by transferring public land and resources into private ownership. The accepted wisdom was that the West . . . represented a seemingly inexhaustible source of potential

6. Robert B. Keiter, *Public Lands and Law Reform: Putting Theory, Policy, and Practice in Perspective*, 2005 UTAH L. REV. 1127, 1128.

wealth”⁷ After the Internet was opened to the public, the U.S. government took a similar approach in encouraging development and “settlement” of the Internet by private and commercial interests.

Of course, in the West

[t]he laws conveying free land and minerals . . . were . . . heavily exploited by large corporations, which acquired valuable public land and resources for a pittance. . . . The idea of an inexhaustible natural bounty also proved false. By the end of the nineteenth century . . . the region’s accessible timber resources were sorely depleted, its wildlife populations were decimated, and the range was badly overused. Boom and bust mining cycles had already left visible scars on the landscape in the form of abandoned mining sites, raw tailings piles, and decaying ghost towns.⁸

In 1891, the federal government responded with the General Revision Act,⁹ a “new natural resource policy, the essential elements of which were public ownership of natural resources, development and use without waste to promote the common good, . . . and the avoidance of monopoly power.”¹⁰ Thus, a century after the beginning of the westward expansion, the government realized that inaction had consequences—that in the absence of control of the public commons by the government, greed and thoughtlessness had filled the void. I fear the last decade of exploitation on the Internet illustrates the need for a recognition of public ownership of the resource, management for the public good, and the avoidance of commercial monopolization.

With the failure of the CDA, the Internet was left free to develop without government regulation of pornography. This freedom crippled the Internet as it was shaped and regulated in other ways and for other purposes.

I. TIMES WERE TOUGH FOR TECHNO-POLITICAL KNOW-HOW IN 1995, 1996, AND FROM 1995–1997

Larry Lessig describes the CDA as a “law of extraordinary stupidity; it practically impaled itself on the First Amendment.”¹¹ Thrown together without much thought,¹² the CDA had techies nearly strangling their mouses in the vehemence of submitting their criticisms *en blog*. The members of

7. *Id.* at 1131-32.

8. *Id.* at 1133 (internal citation omitted).

9. General Revision Act, ch. 561, 26 Stat. 1095 (1891) (repealed 1976).

10. Keiter, *supra* note 6, at 1134.

11. LAWRENCE LESSIG, CODE VERSION 2.0, at 249 (2006).

12. “The Senate went in willy-nilly, passed legislation, and never once had a hearing, never once had a discussion other than an hour or so on the floor.” *Reno v. ACLU (Reno I)*, 521 U.S. 844, 858 n.24 (1997) (quoting *Cyberporn and Children: The Scope of the Problem, The State of the Technology, and the Need for Congressional Action: Hearings on S. 892 Before the S. Comm. on the Judiciary*, 104th Cong. 7-8 (1995) (statement of Sen. Leahy, Member, S. Comm. on the Judiciary)).

Congress in 1997 were intelligent and informed about the interests of their constituents, but they had little more vision of what they were dealing with than most of America at the time. The mood is captured by Professor James Boyle:

The CDA has been hailed as the nadir of congressional regulation of communications technology. Badly drafted, inconsistently worded, and palpably unconstitutional, it appeared to most of the Internet community to be a case of technological ignorance run rampant. . . . [It triggered] proprietary anger that the state was overtly asserting its power over the electronic frontier. “Keep your laws off our Net,” went the slogan.¹³

The Supreme Court response did not align precisely with the “Keep your laws off our Net” views, but it was just as vehement in its way. The opportunity to build into the architecture of the Net at that point a practical and responsible approach to creating a children-appropriate environment was lost. The actions of Congress and the Supreme Court were not unreasonable, but perhaps in each instance they were too extreme. A brief look at the demographics of these actors may be relevant to understanding what happened.

A. The Information-Aged in Congress

The average age of members of the 104th Congress was 50.9 years.¹⁴ Although most of those involved with conceiving and creating the CDA were just past mid-life,¹⁵ in terms of the digital world at that time, their age was a tremendous disadvantage.¹⁶ While members of the House were

13. James Boyle, *Foucault in Cyberspace: Surveillance, Sovereignty, and Hard-wired Censors*, 66 U. CIN. L. REV. 177, 189 (1997) (internal citation omitted).

14. Gabriel Kahn, *Congress Beating the Ultimate Term Limit—Death*, ATLANTA J. & CONST., Apr. 2, 1995, at 5C.

15. For example, of the Act’s original sponsors, Senator Slade Gorton was sixty-seven years old and Senator Jim Exon was seventy-three years old when the CDA passed. See Biographical Directory of the United States Congress, Exon, J. James, <http://bioguide.congress.gov/scripts/biodisplay.pl?index=E000284> (last visited May 13, 2008); Biographical Directory of the United States Congress, Gorton, Thomas Slade, <http://bioguide.congress.gov/scripts/biodisplay.pl?index=G000333> (last visited May 13, 2008).

16. See also Robert Cannon, *The Legislative History of Senator Exon’s Communications Decency Act: Regulating Barbarians on the Information Superhighway*, 49 FED. COMM. L.J. 51, 72-73 (1996).

[T]hat the regulation which Senator Exon [the CDA sponsor] proposes is infeasible [] starts with the criticism that Senator Exon fundamentally misunderstood the medium which he sought to regulate. At no time did Senator Exon ever profess personal experience on the Internet. His staff indicated that he had no first-hand Internet experience. The material that Senator Exon presented from the Internet to the Senate was always downloaded by someone other than himself. Senator Exon’s Washington, D.C., offices had no e-mail address and had no office hook-up

somewhat younger on average, only fifteen members of the Senate were under age fifty and seventeen were over age seventy.¹⁷ They were far too old to have been raised on Nintendo, learned computer programming languages along with Spanish, researched their state reports without opening a book, communicated faster with their hands than with their mouths, or purchased sneakers while sitting through a Shakespeare class. In information-society terms, they were ancient.¹⁸ As one information systems professional put it, "We cannot tackle the digital divide too late in a child's personal evolution. . . . [T]echnology is the fourth basic literacy—after reading, writing and arithmetic. . . . [T]o succeed in the classroom, workplace, home or community, students need to know how to . . . find [and] use . . . information resources."¹⁹

This characterization of members of Congress as techno-neophytes is not an insult or a judgment. The members of Congress who (presumably) hoped to create a safe place for children on the Internet were likely not less tech-savvy than their constituents; they may have been more so.²⁰ But the kinds of skills that Generation X, Generation Y, and the Net Generation take for granted were possessed only by a select number of sixty-year-olds

to the Internet. This begs the question of how a senator with no technical knowledge of the medium can draft language which regulates it.

Id. (internal citations omitted).

17. U.S. CENSUS BUREAU, STATISTICAL ABSTRACT OF THE UNITED STATES: 2007, at 251 (126th ed. 2007).

18. See Timothy Zick, *Congress, the Internet, and the Intractable Pornography Problem: The Child Online Protection Act of 1998*, 32 CREIGHTON L. REV. 1147, 1186 (1999) (discussing the technology gap's effect on COPA enforcement). On the subject of the technology generation gap generally, see Jack Balkin, *The Association of American Law Schools, Section on Mass Communications Law 1997 Annual Conference Panel: Sex, Violence, Children & the Media: Legal, Historical & Empirical Perspective*, 5 COMMLAW CONSPECTUS 341, 354 (1997); Kevin K. Ban, Note, *Does the Internet Warrant a Twenty-Seventh Amendment to the United States Constitution?*, 23 J. CORP. L. 521, 523-29 (1998).

19. David Guzman, *Against All Odds*, CIO MAG., May 1, 2004, at 2 (quoting Kurt Landgraf, CEO of the Educational Testing Service).

20. A 1996 law review article explained the average American's familiarity with the emerging Internet:

Unlike radio or television, few people have access to the Internet at this time, and the medium possesses no unique availability to children. Despite all the media hype, the best statistics indicate that probably only about five percent of Americans can access the net, and many of these are through corporate accounts totally inaccessible to children. Even if the most excited estimates, suggesting an annual doubling of users, prove accurate, the penetration of the Internet is far from the saturation point, and nowhere near the point that justified television and radio regulation on the basis of pervasiveness.

Alan Lewine, *Making Cyberspace Safe for Children (?): A First Amendment Analysis of the Communications Decency Act of 1996*, 18 HAMLINE J. PUB. L. & POL'Y 78, 126-27 (1996) (internal citation omitted).

in 1995, and most of those, I dare suppose, were not charismatic or dogmatic enough to be in high elected office.

Analyses of the limits of Congress's technological understanding as evidenced by the CDA are legion.²¹ Some commentators suggested, perhaps because the statute was so poorly conceived, that the proponents knew it was doomed to fail, and perhaps intended for it to fail, but they pushed it through in an effort to score short-term political points with the public.²² However, the text and the record of the debate belie the argument that the members of Congress had sufficient vision of the workings of the Internet—or the future of e-commerce, the social and psychological implications of information explosion, and the possible uses of meta tags and differentiated ports—to cleverly disguise their insights for some political end.²³ Even if this estimation of Congress's intent were accurate, it remains ludicrous to assume that, armed with real technological know-how combined with a comprehension of democratic ethics, Congress would have determined that passing the CDA was the way to go. Although the cynical will be quick to suggest that a comprehension of democratic ethics is not always the hallmark of American political workings, for now, I am sticking to the *techno-faux-pas* theory.

In short, the members of Congress who (presumably) hoped to create a safe place for children on the Internet underestimated the complications, limitations, and positive architectural possibilities of an effective regulatory

21. See, e.g., Jim Chen, *The Echoes of Forgotten Footfalls: Telecommunications Mergers at the Dawn of the Digital Millennium*, 43 HOUS. L. REV. 1311, 1360-61 (2007) (discussing Congress' underestimation of Internet technology when it added the CDA to the Telecommunications Act of 1996); David K. Djavaheerian, *First Amendment: Indecency: Reno v. ACLU*, 13 BERKELEY TECH. L.J. 371, 371-73 (1998) (discussing the legislative history, including an interesting anecdote of Senator Exon's bluebook); Edward Lee, *Rules and Standards for Cyberspace*, 77 NOTRE DAME L. REV. 1275, 1341 (2002) (asserting that Congress failed to do its homework in understanding the particular problems of Internet regulation); April Mara Major, *Norm Origin and Development in Cyberspace: Models of Cybernorm Evolution*, 78 WASH. U. L.Q. 59, 104-05 (2000) (discussing the CDA drafters' lack of knowledge about the Internet community's values and social norms).

22. Mark C. Alexander, *The First Amendment and Problems of Political Viability: The Case of Internet Pornography*, 25 HARV. J.L. & PUB. POL'Y 977, 984 nn.37-39 (2002) ("It was clear from the moment of conception that the bill would not withstand constitutional scrutiny. But it was a politically appealing attack on a hot-button issue, and no elected official could stop its trajectory. Members of Congress knew the bill was constitutionally unsound but did not stop themselves." (internal citation omitted)); see also *The MacNeil/Lehrer News Hour: Sex in Cyberspace?* (PBS television broadcast June 22, 1995), transcript available at http://www.cdt.org/speech/cda/950622macneill_lehrer.html (remarks of Sen. Exon). The Congressional Record suggests that the CDA's sponsors were aware of the Act's constitutional vulnerability. See, e.g., H.R. REP. NO. 104-458, at 188-89 (1995) (discussing § 502, and arguing at length about the First Amendment implications).

23. See 141 CONG. REC. S9017-S9023 (daily ed. June 26, 1995) (statement of Sen. Grassley) (discussing the sheer volume of pornography but none of the technical issues surrounding it).

scheme. History may prove that their lack of digital understanding and experience, combined with whatever other factors that were at play, resulted in a statute that begged to be put out of its misery with a long-lasting judicial opinion. In the meantime, the digital world dug itself into patterns that may be difficult to reverse.

B. The Information-Aged in the Court

The CDA was challenged in two separate cases: *ACLU v. Reno* was filed in the U.S. District Court for the Eastern District of Pennsylvania,²⁴ and *Shea ex rel. American Reporter v. Reno* was filed in the Southern District of New York.²⁵ On appeal to the Supreme Court, the lower court's opinion in *ACLU v. Reno* was affirmed on June 26, 1997, in a lengthy opinion known as *Reno I*, holding the CDA unconstitutional.²⁶ The Court affirmed *Shea* the next day without a written opinion.²⁷

The findings of fact in the lower court's opinion in *Reno I* illustrate the limited understandings of the use, technology, and future of the Internet common even in educated circles at the time the opinion was issued.²⁸ But the Supreme Court adopted these findings without questioning their validity or, more importantly, recognizing how much the Internet had changed in the intervening time.²⁹ Perhaps the ultimate issue was not so much the description of the Internet the district court provided and the Supreme Court adopted, but the apparent ignorance of the fact that the Internet they were seeing was a small red baby dog about to grow into Clifford.

Of course, the Supreme Court's opinion in *Reno I* included a plethora of legitimate arguments for CDA's unconstitutionality. But some of the Court's stated assumptions about Internet use now incite reactions ranging from snickering to outright laughter from the students in my Internet Regulation classes and random thirteen-to-seventeen-year-olds. These statements include: "[T]he 'odds are slim' that a user would enter a sexually explicit site by accident;"³⁰ and, in contrast to television and radio, "[a] child requires some sophistication and some ability to read to retrieve material and thereby to use the Internet unattended."³¹ Oh, the magic of clicking.

24. 929 F. Supp. 824 (E.D. Pa. 1996).

25. 930 F. Supp. 916 (S.D.N.Y. 1996).

26. *Reno v. ACLU (Reno I)*, 521 U.S. 844 (1997).

27. 521 U.S. 1113 (1997).

28. See, e.g., Djavaherian, *supra* note 21, at 380 (commenting on the technological inaccuracy of the trial court's findings of fact).

29. See *id.*; Lee, *supra* note 21, at 1342-43 (stating that the Supreme Court was not aware of technological changes that had occurred even since the lower court had made its findings).

30. *Reno I*, 521 U.S. at 854.

31. *Id.*

Thus, while the Supreme Court reached the obvious conclusion on the CDA, the judiciary's limited technological experience and vision of the future of the Internet flavored the findings of facts. Perhaps of more importance, the lack of insight may have unduly tainted the articulation of the *Reno I* opinion, making its language broader than necessary: *Reno I* will haunt any future effort to reach a reasonable balance of regulation and free speech.

II. AS IT SHAKES OUT

In this Part, I will discuss a handful of post-CDA Internet developments. First, Section II.A considers two developments touted to be the major upsides of the failure of regulation: (1) the extension of the "Wild West Web," the communications frontier of the common geek;³² and (2) the explosion of technology facilitated by harnessing the talent of free-lance geniuses motivated to get to porn faster and better. Section II.B then considers a few possible downsides to the last decade of "unfettered" evolution of the Internet. First, I reflect on the swift and certain filling of the vacuum left by the failure of democratic regulation with regulation based on the Golden Rule—or "those with the gold make the rules." Second, I briefly describe the drowning of our children in a malignant pool of age-inappropriate, relationship warping, and misleading sexually explicit materials. I then touch briefly on whether a more careful and insightful approach to Internet regulation in the mid-1990s would have affected the rush of the United States government to spin off control of the Internet root system and the related intellectual property rights to a private corporation. Finally, I suggest that a thoughtful coalition in the mid-1990s of interested parties, including geeks, parents, industry, and government, could easily have produced a balanced solution using then-existing technology that could have been built into the architecture of the Internet and vastly reduced the need for government interference, thus serving the Constitution and children.

32. In this Article, geek (aka Internet Frontiersman) means:

- A person who is interested in technology, especially computing and new media. Most geeks are adept with computers, and treat the term *hacker* as a term of respect, but not all are hackers themselves.
- A person who relates academic subjects to the real world outside of academic studies; for example, using multivariate calculus to determine how they should correctly optimize the dimensions of a pan to bake a cake.
- A person who has chosen concentration rather than conformity; one who pursues skill (especially technical skill) and imagination, not mainstream social acceptance.

Wikipedia, The Free Encyclopedia, Geek, <http://en.wikipedia.org/wiki/Geek> (last visited May 13, 2008).

The blow that Internet regulation took in *Reno I* may forever shape Internet use and development. In the years since the CDA was raised and felled, the Internet has naturally developed differently than it would have if a sensible regulation of Internet pornography had been in place. For purposes of this Article, I do not speculate on how the demise of the CDA affected the later enactment of, and judicial volleyball with, the Child Online Protection Act (COPA).³³ Nor do I delve into how the likely failure of COPA has, and will, influence the subsequent development of the information society. Rather than focus on COPA or any other marker in this period, I hypothesize that the CDA, the first dramatic *soirée* of Congress into the business of weighing technology, First Amendment, and families, represents a critical juncture in our metamorphosis into the Information Society.

A. Lemonade from Lemons

Many hail the demise of Congress's first major attempt at regulating Internet indecency as a monumental victory for freedom and technology. When the Supreme Court's CDA decision sent lawmakers back to the drawing board, at a minimum those opposed to regulation of the Internet had something they valued: more time.

1. *A Little Longer on the Range*

The Internet began as a largely unregulated space and, with the failure of regulatory attempts such as the CDA, geeks have been surprisingly successful in avoiding government intervention. Senator John Ashcroft likened the Internet to "the Wild West of the 19th century."³⁴ The romantic notion of the free range in the Wild West is compelling. Those of us whose people came to the Rocky Mountains in the 1850s understand. We hate seeing all

33. 47 U.S.C. § 231 (2000). For commentary on the taint that the CDA might have lent to COPA, see Zick, *supra* note 18, at 1173:

The speed with which Congress acted in passing COPA prevented it from deliberating at length the merits of its second Internet zoning project. As a result, COPA has a legislative pedigree only slightly more impressive than that of the CDA. Like the CDA, COPA was appended to a far more substantial legislative enactment; the law was tucked into the 5000-plus page Omnibus Budget Bill of 1998. Perhaps sensing the Supreme Court's frustration with the apparent lack of forethought that preceded passage of the CDA, Congress held two hearings prior to passing COPA that addressed the ease with which children can access pornography on the Internet and the need for a congressional response to this problem.

Id.

34. John Ashcroft, *Keep Big Brother's Hands Off the Internet*, 24 USIA ELECTRONIC J. (Oct. 1997), available at <http://usinfo.state.gov/journals/itgic/1097/ijge/gj-7.htm>.

these “rich Easterners” in our wilderness playgrounds. We sing, as the original frontiersmen did:

Oh, give me a home where the buffalo roam,
Where the deer and the antelope play;
Where seldom is heard a discouraging word
And the skies are not cloudy all day
* * *
Oh, give me a land where bright diamond sand
Shows in the glittering stream;
That glideth along like a graceful white swan,
Like a maid in a lovely day dream.³⁵

Similar to the Internet geek, these original riders of the range wanted for themselves an unrealistically opportunistic playground: wild beasts playing free; none of the discouragement or clouds that might accompany complex issues of rights and regulations; and bling—not to mention willing maidens who never ask them to take out the garbage.

Many Internet proponents vehemently strive to protect this “frontier” characteristic of the Internet, and the classic dystopian example found in George Orwell’s seminal work, *1984*,³⁶ is a very real fear for many, if not most, geeks. Most online discussions of government regulation of the Internet invariably mention Orwell’s work directly, or by reference to key concepts of the book, such as “thought police” or “Big Brother.”³⁷

In response to the Telecommunications Act of 1996, of which the CDA was a part,³⁸ John Barlow, a retired Wyoming cattle rancher, a former lyricist for the Grateful Dead, and co-founder of the Electronic Frontier Foundation, penned a Declaration of the Independence of Cyberspace. It begins:

Governments of the Industrial World, you weary giants of flesh and steel, I come from Cyberspace, the new home of Mind. On behalf of the future, I ask you of the

35. G.F. Will, *Songs of Western Cowboys*, 22 J. AM. FOLKLORE 256, 257-58 (1909), available at <http://links.jstor.org/sici?sici=00218715%28190904%2F06%2922%3A84%3-C256%3ASOWC%3E2.0.CO%3B2-J> (“No information could be obtained as to its origin, but after questioning a number of older cowboys it seems it is almost universally known in the northwest, although most of the men knew but a few verses.”).

36. GEORGE ORWELL, 1984 (1949).

37. See, e.g., Mark Henricks, *Where’s Big Brother? Orwell’s Nightmare Won’t Be Coming to the Internet Anytime Soon—Smarts*, ENTREPRENEUR (July 2003), available at http://findarticles.com/p/articles/mi_m0DTI/is_7_31/ai_104079122; Cade Metz, Microsoft-loving (former) Security Czar Calls for Closed Internet, Wired New York—Forum, Oct. 2, 2007, <http://wirednewyork.com/forum/showthread.php?t=15365>.

38. Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996).

past to leave us alone. You are not welcome among us. You have no sovereignty where we gather.

We have no elected government, nor are we likely to have one, so I address you with no greater authority than that with which liberty itself always speaks. I declare the global social space we are building to be naturally independent of the tyrannies you seek to impose on us. You have no moral right to rule us nor do you possess any methods of enforcement we have true reason to fear.

Governments derive their just powers from the consent of the governed. You have neither solicited nor received ours. We did not invite you. You do not know us, nor do you know our world. Cyberspace does not lie within your borders.³⁹

While these may not be the exact sentiments of all Internet Frontiersmen, they do seem to reflect their general feelings toward government regulation of the Internet.⁴⁰

In addition to those who resisted regulation out of principle, there is also an argument that government attempts at regulation are simply unwise or impracticable. Senator Ashcroft said,

I believe that moving forward with the president's policy or the Commerce Committee's bill would be an act of folly, creating a cadre of government "peeping toms" and causing severe damage to our vibrant software industries. Government would be caught in a perpetual game of catch-up with whiz-kid code-breakers and industry advances.⁴¹

This statement expresses the concerns that many geeks have voiced: Internet regulation sets a bad precedent for this, or any, government to follow. Legislation invariably takes time to pass and implement, and the scale on which this process takes place is vastly different from the time scale on which advancements in Internet technology occur. The "whiz-kid" that Senator Ashcroft discusses will always have some new way of circumventing the regulations, most likely before the legislation is even in place. With the online world ever-changing and uncertain, it would seem that full and lasting Internet regulation is a daunting task to accomplish, if not an impossible chimera. Geeks are all too aware of the complications that such a battle entails. The reprieve given by the failure of the CDA gave them the op-

39. John Perry Barlow, *A Declaration of the Independence of Cyberspace*, Feb. 8, 1996, <http://homes.eff.org/~barlow/Declaration-Final.html>.

40. See, e.g., Joseph M. Reagle, Jr., *Why the Internet Is Good: Community Governance that Works Well* (Berkman Center Working Draft, 1998), available at <http://cyber.law.harvard.edu/people/reagle/regulation-19990326.html> (describing an anarchist preference for the ways the Internet has developed to regulate itself over any possible direct or indirect ways the government could regulate); Hands Off the Internet, Statement of Principles, http://handsoff.org/hoti_docs/aboutus/principles.shtml (last visited May 13, 2008) (stating that the only proper government regulations on the Internet are to combat criminal activity).

41. Ashcroft, *supra* note 34.

portunity to linger longer in a position of personal and group power in this alternate reality:

The Internet created a new world with new rules. While in the real world, the athletic, the strong, the good looking and the socially adept ruled, on the Internet such physical attributes were no longer as important. The geeks were finally free to rule and influence their world. With this new world came a new Renaissance, one might say; a Renaissance of Information. Geeks were re-thinking the limitations that had previously been placed on them in the real world and with this re-thinking came a rebel mentality not unlike the Wild West. The geeks made their own rules better fit for this new world of their creating. On the Internet, politicians are the outsiders, a position they may not be accustomed to. But in order to survive in the realm of the Internet they must be reminded that they are no longer in their world.⁴²

After the failure of the CDA, the Internet transformed from an exclusive government tool to a public machine of communication and commerce. Between 1995 and 1998, twenty-two million computers were added to the Internet.⁴³ The year 1996 saw the introduction of search engines, JAVA, and Internet phones;⁴⁴ 1997 welcomed multicasting;⁴⁵ 1998 brought e-commerce, e-auctions, and portals;⁴⁶ online banking arrived in 1999;⁴⁷ Napster and handheld wireless devices were born in 2000.⁴⁸ The last seven years have continued the trend, welcoming countless other geek achievements, including blogs, radio station Web broadcasting, and online elections.⁴⁹

2. *Naked Women as Carrots*

Opponents of Internet regulation insist that government intervention would have dulled the private programming urge. One commentator argues that leaving the Internet in the hands of the common geek, rather than in a largely technology-challenged government bureaucracy, was essential:

Those individuals developing the medium were technologically sophisticated individuals with an interest in advancing the medium. . . . [P]unt[ing] regulation of the Internet to a government bureaucratic entity having no particular familiarity or expertise in the medium would stifle the development of that medium. . . . The Internet is the telecommunications means for the common person; bogging it down

42. Christopher Eastwood, *Getting the Geek Vote: Involving the Technically Savvy in Internet Regulation* 19 (on file with author).

43. INDIANA UNIVERSITY, INFORMATION TECHNOLOGY STRATEGIC PLAN: ARCHITECTURE FOR THE 21ST CENTURY, at pt. B (1998), http://www.indiana.edu/~ovpit/strategic/b_.html.

44. Robert H. Zakon, Hobbes' Internet Timeline v8.2, <http://www.zakon.org/robert/internet/timeline/> (last visited May 13, 2008).

45. *Id.*

46. *Id.*

47. *Id.*

48. *Id.*

49. *Id.*

while deregulating and freeing the hands of huge telecommunications giants is offensive.⁵⁰

No one stood to benefit more from this interlude of unregulated technical experimentation on the Web than commercial pornographers. “An impressive array of informed outsiders have highlighted cybersex’s importance in accelerating innovation and developing technologies.”⁵¹

- Journalist T.R. Reid in 1995 considered cybersex “arguably one of the great pioneers of the multimedia industry.”
- The *Economist* in 1997 hailed pornography as a “trailblazer in the economics of new technologies,” helping the web mature economically by testing technologies and concepts to attract customers and their money
- In 2000, VarBusiness.com proclaimed online pornography was “arguably the edge of e-commerce and e-business.”
- In 2001, Blaise Cronin and Elisabeth Davenport stated, “It is universally acknowledged by information technology experts that the adult entertainment industry has been at the leading edge in terms of building high-performance Web sites with state-of-the-art features and functionality.”⁵²

With the borderless and lawless nature of the Internet, the pornography industry no longer had to deal with the zoning laws, age restrictions, postal regulations, and so forth, that have long applied in the hard-copy world. Thus, the fact that the CDA was busted is frequently credited with fostering a developmental heyday.⁵³

B. Or Just Lemons

While positive advancements may have come from the extended “frontier feeling” as well as the porn incentive to rigorous expansion of

50. Cannon, *supra* note 16, at 90-91.

51. Jonathan Coopersmith, *Does Your Mother Know What You Really Do? The Changing Nature and Image of Computer-Based Pornography*, 22 HIST. & TECH. 1, 2 (2006).

52. *Id.* (internal citations omitted).

53. See, e.g., Peter Johnson, *Pornography Drives Technology: Why Not to Censor the Internet*, 49 FED. COMM. L.J. 217, 218 (1996) (arguing that pornography is a positive evil that encourages development of technology and leads to new investments); Jason Oxman, *The FCC and the Unregulation of the Internet*, at 6 (FCC Office of Plans and Policy, Working Paper No. 31, 1999), available at http://www.fcc.gov/Bureaus/OPP/working_papers/oppwp31.pdf (suggesting that a lack of regulation fosters growth and development of the Internet); Internet Telephony Consortium European Regulatory Task Force, Internet Telephony Interoperability Consortium, Massachusetts Institute of Technology, Comment to the European Commission Concerning the Status of Voice on the Internet under Directive 90/388/EEC, available at http://ec.europa.eu/comm/competition/liberalization/legislation/-comment11_en.html#1 (“Premature regulation of Internet telephony would hinder innovation in this field as well as hinder innovation for the Internet and the public telecommunications network.”) (last visited May 13, 2008).

technology, the post-CDA period is also marked by the notable debasement of other values. In this Section, I discuss four harms that may be related to the CDA debacle. First, I argue that after 1996, the beloved “free-range frontier” was quickly fenced, channeled to particular byways, and paved by commercial and economic interests just as powerful, if not more powerful, than democratic government. Second, the message between the lines in *Reno I*, the opinion that nullified the CDA, that speech on the Internet could never be constitutionally regulated, quenched the effort of the major technology developers to find code and architecture that could facilitate a less intrusive solution. Third, those unfortunate enough to have been navigating late childhood and adolescence during the last decade, and without tech-savvy parents, have been dropped in an ocean of sexually explicit material perhaps wider and deeper than was ever envisioned by the drafters of the CDA and the *Reno I* Court. Finally, the U.S. government, seeing Internet governance as primarily a question of trademark law, hastily gave control of the taxpayer-funded public resource to a private corporation committed to protecting U.S. trademark holders, but without interest in any other values. Some of these developments may be traceable, at least in part, to the bust that was the CDA.

1. *The Sellout*

In the wake of the government’s attempt to impose indecency regulation on the Internet was struck down in 1996, rapid commercialization of cyberspace brought control and structure of profound significance.⁵⁴ Even though geeks rejoiced in the chance to roam the range a little longer after *Reno I*, private industry promptly stole this opportunity from them and settled the frontier, sometimes with their unwitting help. This inevitability as illustrated in other contexts is described by Jack Goldsmith and Tim Wu:

“[T]ime . . . initially seems to favor pirates and pioneers.” . . . After an initial period of uncertainty, the government responds to business and consumer demand to assert the control over the new technology needed to make it widely available. Government is crucial here, because only it “can defend firms’ property rights,”

54. See, e.g., LESSIG, *supra* note 11, at xiv (noting “how the forces behind commerce could play a role in facilitating . . . regulation”), xv (predicting “[a] future of control in large part exercised by technologies of commerce, backed by the rule of law”), 7 (“The first generation of these architectures was built by a noncommercial sector—researchers and hackers, focused upon building a network. The second generation has been built by commerce.”), 38 (noting that regulatory changes were “made for purely pragmatic, commercial ends”), and 61 (“Commerce has done its part—for commerce and, indirectly, for governments. Technologies that make commerce more efficient are also technologies that make regulation simpler.”).

“regulate their interaction with a demanding consumer market,” and “help to keep the pirates at bay.”⁵⁵

And, in many instances, law then serves to keep the pioneers at bay as well. The “leading civil liberties group defending your rights in the digital world,” the Electronic Frontier Foundation (EFF),⁵⁶ also acknowledged this shift:

While early threats to our right to communicate came from the government, current threats come also from industry, as it seeks to control and expand current revenue sources The trend has been for industry to use a combination of law and technology to suppress the rights of people using technology.⁵⁷

Not only does the technology developed by commercial interests now serve to impose a certain architectural structure on the Internet, the big money investors next seek to pull government back in to defend and protect their empires. These strong corporate and industry lobby groups helped draft and push through Congress other forms of government regulation, such as the Digital Millennium Copyright Act.⁵⁸ Professor Lawrence Lessig observes, “This pattern is not an accident. In a political world that is dominated as ours is, lawmaking happens when special interests benefit. . . . There have been 24 bills about copyright because rock stars lobby for them.”⁵⁹ The power of these economic interests explains, at least in part, why the government has found a way to work around the First Amendment, the public commons, and bottom-up innovation to provide protection of copyright, but not children.

An interesting parallel can be drawn between the failure to protect children and the neglect of personal privacy interests. Richard Spinello laments, “It seems highly unlikely, however, that free market mechanisms alone can reverse the trend of privacy erosion on any significant scale. The biggest problem is that the vast majority of consumers are not really energized about this issue.”⁶⁰ As a result, “The U.S. has relied on a philosophy

55. JACK GOLDSMITH & TIM WU, WHO CONTROLS THE INTERNET?: ILLUSIONS OF A BORDERLESS WORLD 124 (2006) (quoting DEBORA L. SPAR, RULING THE WAVES: FROM THE COMPASS TO THE INTERNET, A HISTORY OF BUSINESS AND POLITICS ALONG THE TECHNOLOGICAL FRONTIER (2001)).

56. The Electronic Frontier Foundation is the self-proclaimed “leading civil liberties group defending your rights in the digital world.” Electronic Frontier Foundation, <http://www.eff.org> (last visited May 13, 2008). For more information about the Electronic Frontier Foundation and its role in fighting government regulation of the Internet, among other things, see Electronic Frontier Foundation, Our Work, <http://www.eff.org/work> (last visited May 13, 2008).

57. Electronic Frontier Foundation, EFF’s History, <http://www.eff.org/about/history.php> (last visited May 13, 2008).

58. 17 U.S.C. § 1201 (2000).

59. LESSIG, *supra* note 11, at 337.

60. RICHARD A. SPINELLO, CYBERETHICS: MORALITY AND LAW IN CYBERSPACE 152 (3d ed. 2006). See also LESSIG, *supra* note 11, at 200 (“With copyright, the interests threat-

of self-regulation; legal rights have been downplayed.”⁶¹ As the government has shied away from initiating regulation on its own, the general public was left at the mercy of special interest groups and lobbyists, whose agendas do not always serve the public.

2. A Better Mousetrap

Instead of dashing off the CDA and turning to other concerns, a tech-savvy Congress could have brought together code, law, Internet architecture, and public norms to find a superior solution to the inevitable pornification of the Internet. One fan of the so-called unfettered frontier, Richard Spinello, claims that the crash of the CDA actually fostered a more effective solution to Internet abuses, PICS:

The adoption of filtering or PICS technologies is a striking example of how “code” is becoming a substitute for law as a constraint on cyberspace behavior. Thanks to the nullification of the CDA, Internet stakeholders in increasing numbers will resort to software that *may be* far more effective than the law in suppressing pornographic material.⁶²

This passage is included in Spinello’s 2003 second edition,⁶³ as well as the 2006 third edition—as though nothing had changed. In the meantime, Platform for Internet Content Selection (PICS) technologies had withered,⁶⁴ and pornography became considerably less constrained on the Internet.⁶⁵

The argument that necessity (and opportunity) is the mother of invention works the other way as well. Had Congress enacted a more carefully conceived version of the CDA in 1995 requiring age verification, and had the Court upheld it, the pornography industry and its fans would certainly have used their talents to devise cheap, easy, and effective age-recognition software. The technology development excitement of the post-CDA era would still have been robust in every area where access by minors is not necessary. Unfortunately, the failure of the CDA did not lead to a “far more effective” scheme.

ened are powerful and well organized; with privacy, the interests threatened are diffuse and disorganized.”).

61. SPINELLO, *supra* note 60, at 156.

62. *Id.* at 66.

63. See RICHARD A. SPINELLO, CYBERETHICS: MORALITY AND LAW IN CYBERSPACE 65 (2d ed. 2003). The 2000 first edition version is a less specific expression of hope:

This is indeed a striking example of how “code” is becoming a substitute for law as a constraint on cyberspace behavior. Thanks to the nullification of the CDA, Internet stakeholders in increasing numbers will resort to software that may be far more effective than the law in suppressing pornographic material.

RICHARD A. SPINELLO, CYBERETHICS: MORALITY AND LAW IN CYBERSPACE 53 (2000).

64. See discussion *infra* Subsection II.B.2.a.

65. See *infra* Subsection II.B.3.

a. What Happened to PICS?

In June 1995, the Senate passed the CDA.⁶⁶ In response, seeking a more palatable approach, the House passed the Internet Freedom and Family Empowerment Act,⁶⁷ suggesting website labels as an alternative.⁶⁸ This bill called “for industry to set standards and develop software for filtering content.”⁶⁹

Shortly thereafter, the World Wide Web Consortium, an international policy group,⁷⁰ announced the release of PICS.⁷¹ PICS provided an infrastructure for content labeling that was intended to permit self-regulation.⁷²

66. See Steve Lohr, *Industry Seeks Means to Filter Internet Content*, N.Y. TIMES, Sept. 11, 1995, at D7.

67. See H.R. 1978, 104th Cong. (1995).

68. See Todd Copilevitz, *Software to Let Users Screen Internet: Consortium to Announce System for Parents, Others to Create Own Ratings*, DALLAS MORNING NEWS, Sept. 9, 1995, at 1A. Senator Exon’s press secretary relates: “Remember, no one was talking about these blocking devices [or what many call PICS] before [Senator Exon’s] measure. His thought is there needs to be several different ways of going after this issue.” *Id.* See also Elizabeth Corcoran, *Computer Industry to Fight On-Line Smut*, BUFFALO NEWS (New York), Sept. 10, 1995, at C6.

69. See Lohr, *supra* note 66.

70. The World Wide Web Consortium, or W3C, was formed to coordinate work with various international organizations and to provide “a vendor-neutral forum for the creation of Web standards.” About the World Wide Web Consortium (W3C), <http://www.w3.org/Consortium/> (last visited May 13, 2008).

71. Copilevitz, *supra* note 68. Not all greeted PICS with enthusiasm. Many viewed it as a means of censorship. See Libertus.net, *Labeling: Protection or Oppression*, Jan. 12, 1997, <http://libertus.net/liberty/label1.html>; see also Ashley Craddock, *ACLU: Labeling May Lead to Lost Liberty*, WIRED, Aug. 8, 1997, <http://www.wired.com/politics/law/news/1997/08/5882> (discussing the ACLU’s concern with PICS and other voluntary rating systems); Jaron Lanier, *PICS Puts on the Red Light*, WIRED, Mar. 13, 1997, <http://www.wired.com/politics/law/news/1997/03/2553>; Michael Stutz, *PICS Walks Fine Line on Net Filtering*, WIRED, Dec. 15, 1997, <http://www.wired.com/science/discoveries/news/1997/12/9176> (stating that PICS does have the ability to improve filtering without censoring; however, the article also suggests through a quote by Michael Fromkin that because of PICS’s complexity, a person may end up just choosing who is censoring his or her material rather than avoiding unneeded censorship); Rebecca Vesely, *Cyberspace Braces for Bay of PICS*, WIRED, June 27, 1997, <http://www.wired.com/politics/law/news/1997/06/4794>; *Anti-Censorship Groups Oppose Filtering Extensions*, WIRED, Dec. 12, 1997, <http://www.wired.com/science/discoveries/news/1997/12/9329> (stating that some organizations believe that government will take advantage of the PICS system to develop complex screening profiles that will limit free expression).

72. See Paul Resnick & James Miller, *PICS: Internet Access Controls Without Censorship*, 39(10) COMM. OF THE ACM 87 (1996), available at <http://www.w3.org/PICS/iacwcv2.htm>; Simson Garfinkel, *Microsoft Employs Good, Clean PICS*, WIRED, Feb. 5, 1997, <http://www.wired.com/science/discoveries/news/1997/02/1867>; Electronic Frontiers Australia, *Internet Content Rating and Labelling Systems*, <http://www.efa.org.au/Issues/-Censor/cens2a.html> (last visited May 13, 2008); Laurent Belsie, *Keeping ‘Cybersmut’ Beyond Kids’ Reach*, CHRISTIAN SCI. MONITOR, Sept. 11, 1995, at 4.

With PICS, a simple software code was invisibly embedded in content served on the Web.⁷³ The coded “tags” would identify a range of characteristics of the content.⁷⁴ Internet users could then program individual browsers or filters to block certain categories of content.⁷⁵ Many believed that PICS was the answer that “American high-technology companies” provided as a reason to defeat the CDA.⁷⁶

Representative Anna Eshoo, proposed improvements to the CDA in the form of the Online Parental Control Act shortly after the PICS technology was finished.⁷⁷ Her bill substituted “harmful to minors” for the “decency” language in the CDA,⁷⁸ and specifically mentioned PICS as a mechanism that would allow the enforcement of the “harmful to minors” standard.⁷⁹ At the time of Eshoo’s bill, however, the original CDA was “on the fast track to Supreme Court challenge.”⁸⁰ Members of Congress had little interest in revisiting the issue.⁸¹

Meanwhile in the United Kingdom, the Recreational Software Advisory Council (RSACi) used PICS software to provide an Internet rating system. This system gave web publishers the means to voluntarily identify their content and have RSACi generate the relevant labels. In *Reno I*, when the Supreme Court rejected the CDA, Justice O’Connor, joined by Justice Rehnquist, seemed to encourage the further development and use of PICS in the United States. She described such a technology:

Gateway technology is not ubiquitous in cyberspace, and because without it “there is no means of age verification,” cyberspace still remains largely unzoned—and unzoneable. User-based zoning is also in its infancy. For it to be effective, (i) an agreed-upon code (or “tag”) would have to exist; (ii) screening software or browsers with screening capabilities would have to be able to recognize the “tag”; and (iii) those programs would have to be widely available—and widely used—by Internet users.⁸²

But she regretted that, “[a]t present, none of these conditions is true.”⁸³ Although acknowledging that the CDA and the Internet had to be evaluated

73. Lohr, *supra* note 66.

74. Resnick & Miller, *supra* note 72.

75. *Id.*

76. Lohr, *supra* note 66.

77. David Plotnikoff, *Eshoo Unveils Net Law*, SAN JOSE MERCURY NEWS, Mar. 15, 1996, at 1C. *See also* Notebook, 16(52) COMM. DAILY, Mar. 15, 1996, at 8 (regarding the introduction of legislation by “Rep. Eshoo (D-Cal) and 4 co-sponsors”).

78. Plotnikoff, *supra* note 77.

79. *Id.*

80. *Id.*

81. *Id.*

82. *Reno v. ACLU (Reno I)*, 521 U.S. 844, 891 (1997).

83. *Id.*

as they were presented to the Court, she stated encouragingly that “the prospects for the eventual zoning of the Internet appear promising”⁸⁴

Thereafter, the Clinton Administration sought a more workable approach.⁸⁵ In July 1997, President Clinton brought executives from high tech groups to discuss new approaches to resolving the issue of material that was harmful to minors.⁸⁶ Reportedly, Clinton, along with members of the industry, coalesced around the idea of a web rating system similar to the U.K.’s RSACi.⁸⁷ Those involved committed to “mak[e] the Internet ‘family-friendly’ without governmental regulation[,]”⁸⁸ by “giving parents a ‘virtual toolbox’ filled with already existing filtering technology bolstered by law enforcement.”⁸⁹

The commercial interests, especially major news agencies—Time Inc., Cable News Network, The New York Times Co., Wall Street Journal, and Associated Press—threatened to make their sites invisible to non-registered users, rather than rate their sites according to PICS.⁹⁰ RSACi responded by proposing a middle ground that would label these sites as “news.”⁹¹ The press lobby was not persuaded.⁹²

In 1999, RSACi folded into the Internet Content Rating Association (ICRA).⁹³ Shortly after this reorganization, ICRA organized a meeting in Munich, Germany, to establish a “‘voluntary’ international rating system for Internet content.”⁹⁴ Many Internet industry leaders were uncomfortable with this meeting and its goals.⁹⁵ Much of the strength of PICS faltered in 1999 and thereafter.

84. *Id.*

85. Louise Kehoe, *Clinton Acts to Protect Cyber-Kids*, FIN. TIMES (UK), July 17, 1997, at 6. *See also* Joel Kirkland, *Software Giants Seeking Way to Filter Web Smut*, CHI. TRIB., July 17, 1997, at 8.

86. Kehoe, *supra* note 85.

87. *Id.* The approach that the Clinton administration seemed to favor at the time was like that of the prevailing rating system for television programs. *Id.*

88. Julie Hirschfeld, *Consensus Announced to Make Web Child-Safe*, DALLAS MORNING NEWS, July 17, 1997, at 2D. *See also* Kirkland, *supra* note 85.

89. Hirschfeld, *supra* note 88.

90. Amy Harmon, *Some News Organizations Take Umbrage at Rating Their On-Line Sites*, N.Y. TIMES, Sept. 1, 1997, at D3.

91. *Id.*

92. *Id.*

93. *See* Recreational Software Advisory Council, <http://www.rsac.org/> (last visited May 13, 2008). Some arguments are made that this organization was created of “big-time industry players bent on developing its own regulations to avoid potential government regulation of Internet content.” David McGuire, *ACLU Blasts Online Rating Conference*, NEWSBYTES PM, Sept. 9, 1999, available at 1999 WLNR 4137982.

94. McGuire, *supra* note 93.

95. David McGuire, *Internet Ratings Memo to Spark Discussion*, NEWSBYTES PM, Sept. 10, 1999, available at 1999 WLNR 4125664 (stating that certain groups believed that

During that time, Congress passed the Children's Internet Protection Act (CIPA).⁹⁶ CIPA did not reference PICS or ICRA. Thereafter, ICRA tried to revitalize the labeling idea by proposing a tri-layered approach.⁹⁷ For a while, the ICRA approach generated some enthusiasm.⁹⁸ But in 2006, operators of commercial sites with sexually explicit material attacked a proposed amendment to a telecom reform bill⁹⁹ that required some form of mandatory labeling of adult websites.¹⁰⁰ While the Association of Sites Advocating Child Protection (ASACP), whose members include Playboy.com, Hustler.com, and other smaller adult websites, support voluntary self-

the voluntary rating system would lead to a violation of civil liberties and facilitate government restrictions on the Internet).

96. Children's Internet Protection Act of 2001, Pub. L. No. 106-554, 1701-1741, 114 Stat. 2763 (2000) (codified at 20 U.S.C. § 9134 (2001) and 47 U.S.C. § 254(h) (2001)).

97. Anick Jesdanun, *Despite Flops, Systems Clings to Life*, S. FLA. SUN-SENTINEL, Mar. 17, 2001, at 25A. The three-layered approach began with "[w]eb sites describ[ing] themselves using an online questionnaire." *Id.* Then "based on those descriptions, outside groups can develop software templates to block the types of content they consider inappropriate." *Id.* Parents could then "choose templates from whomever they trust most: [p]erhaps their church, or a free-speech group like the ACLU." *Id.* "Finally, parents can add lists of acceptable sites and override settings in the first two layers." *Id.*

98. *Internet Cos. Support Filtering*, NEWSDAY, Oct. 23, 2001, at A50. *See also* William Glanz, *Internet Leaders OK Content-Rating Plan; Programmed Filters Would Block Sites*, WASH. TIMES, Oct. 24, 2001, at C10 (stating that Yahoo Inc., AOL Time Warner Inc., and Microsoft Corp. committed to participate in ICRA filtering and that Playboy.com also committed to using the technology); D. Ian Hooper, *Internet Firms Back System For Rating Sites*, SAN ANTONIO-EXPRESS NEWS, Oct. 24, 2001, at 8E; Jon Schwartz, *Online Services Agree to Ratings*, N.Y. TIMES, Oct. 24, 2001, at C8; Associated Press, *Internet Companies Endorse Plan to Keep Children Away From Porn*, ST. LOUIS POST-DISPATCH, Oct. 24, 2001, at C2.

99. The amendment, named Advanced Telecommunications and Opportunity Reform Act, was included as Title VIII in the Senate Commerce Committee's markup of the Communications Opportunity, Promotion, and Enhancement Act of 2006, HR-5252. Senate Commerce Committee Marks Up Communications Bill, TLJ News from June 26-30, 2006, <http://www.techlawjournal.com/home/headlines/2006a.asp> (last visited on May 13, 2006); *see also* *Broadcast Indecency Precedent Is Basis For DoJ on Web Labeling*, WASH. INTERNET DAILY, Sept. 18, 2006, available at 2006 WLNR 16268362; *Internet Content Label Bill Criticized as Counterproductive*, TELECOMM. REP., Oct. 1, 2006, available at 2006 WLNR 23704761 (citing to Leslie Harris, executive director of the Center for Democracy and Technology) ("The language in the provisions, which the Justice Department is backing, could be interpreted to apply not just to sexual acts but to 'lewd and lascivious behavior' by adults, because the definition for sexually explicit material relies on language from a child protection statute . . .").

100. *Mandatory Web Labeling Called 'Recipe for Self-Censorship'*, WASH. INTERNET DAILY, July 3, 2006, available at 2006 WLNR 11696522 (Mandatory Web Labeling). During this same time others introduced similar legislation, such as one requiring members of the House and Congress label their web sites consistently with ICRA. *See SRES184: CRS Bill Digest for SRES184*, CRS BILL DIGEST, Nov. 30, 2006, available at 2006 WLNR 20986652; *HRES430: CRS Bill Digest for HRES430*, CRS BILL DIGEST, Nov. 30, 2006, available at 2006 WLNR 20918793.

regulation based on labeling, no serious effort to adopt a mandatory scheme has surfaced.¹⁰¹

b. Over 6,500 Ports in 1995

In 1995, as today, the Internet was comprised of over sixty-five thousand separate ports.¹⁰² Congress might have considered the possibility of incentivizing the categorization of content on the existing unused available ports so Internet consumers could purchase *a la carte* Internet access packages from their Internet Service Providers (ISPs).¹⁰³ This approach gives choice to Internet users at the point of delivery, but is not encoded in the point-of-delivery computer. Thus, it is un-hackable by the resident teenager, unlike filters. This Article is not the place for a full discussion of the port-channeling approach, or the problems with filters, as I have addressed it at length elsewhere.¹⁰⁴

In 1996, Congress decided against adopting any plan that integrated Internet architecture, or West Coast Code, with their traditional tool of law, or East Coast Code. Stuck in a one-note opera, Congress underestimated

101. In Europe, governments have tried to create a system relying on industry self-regulation with government supervision, called “co-regulation” or “regulated self-regulation.” HANS-BREDOW-INSTITUT FOR MEDIA RESEARCH AT THE UNIVERSITY OF HAMBURG, FINAL REPORT: STUDY ON CO-REGULATION MEASURES IN THE MEDIA SECTOR: STUDY FOR THE EUROPEAN COMMISSION, DIRECTORATE INFORMATION SOCIETY AND MEDIA 25-26 (2006) (English version), http://www.hans-bredow-institut.de/forschung/recht/co-reg/Co-Reg-Draft_Final_Report.pdf. For a discussion of co-regulation and how ICRA has been involved, see FAMILY ONLINE SAFETY INSTITUTE, STATE OF ONLINE SAFETY REPORT 2008, at 37-38 (2008), http://www.fosi.org/stateofonlinesafety/2008_us.pdf. See also Eva Lievens et al., *The Co-Protection of Minors in New Media: A European Approach to Co-Regulation*, 10 U.C. DAVIS J. JUV. L. & POL’Y 97 (2006) (discussing what co-regulation is and other alternatives of that concept.).

102. See Farhad Abarghoui et al., *Port Numbers and Sockets for TCP/IP: Selection of Ports and Port Numbers Requires Care and Understanding of How the System Assigns Ports*, UNIX REV. PERFORMANCE COMPUTING, Feb. 1, 1992, at 44 (“Any port in the range of 1 to 1,023 is reserved. . . . Port numbers in the range of 1,024 to 65,536 are considered non-privileged and can be used by any process.”); see also Internet Assigned Numbers Authority, Port Numbers, <http://www.iana.org/assignments/port-numbers> (last visited May 13, 2008) (explaining the uses for the different numbered ports); CP80 Solutions: Technology, www.cp80.org/solutions/technology (last visited May 13, 2008) (listing many such ports). The number is derived from 2 to the 16th power (2^{16}) which equals 65,536 and means there are 16 slots (bits) comprised of either a 1 or a 0 to come up with that many combinations.

103. For a more thorough description of this approach, see, for example, CP80 Solutions, *supra* note 102; Cheryl B. Preston, *Zoning the Internet: A New Approach to Protecting Children Online*, 2007 BYU L. REV. 1417; and Cheryl B. Preston, *Making Family-friendly Internet a Reality: The Internet Community Ports Act*, 2007 BYU L. REV. 1471.

104. See Preston, *Zoning the Internet*, *supra* note 103; Preston, *Making Family-friendly Internet a Reality*, *supra* note 103.

the power of an integrated approach and continued to think only in terms of law.

3. *The Sexual Abuse of Information*

a. More

In the twelve years that the Internet has been allowed to expand without anti-porn regulation, the pool of pornography available on the Internet has grown exponentially wider and more treacherous. Not only has the number of pornography pages grown, but the available images are cheaper, faster, and more skillfully marketed.

The sheer quantity of pornography use has increased dramatically since the days of the CDA. In August 2005, “Internet users viewed over 15 billion pages of adult content.”¹⁰⁵ In 1998, there were fourteen million identified pages of pornography, a number that increased twenty fold (2000%) to two hundred and sixty million in 2003.¹⁰⁶ In one month during 2005, over seventy-one million people—forty-two percent of the Internet audience—viewed Internet pornography.¹⁰⁷ Internet pornography access is not limited to computers; the web-enabled mobile phone industry was already a \$1 billion market in 2005.¹⁰⁸ In 2006, the U.S. pornography industry was estimated to be worth about \$13.33 billion, with about \$2.84 billion coming from Internet pornography.¹⁰⁹ The \$2.8 billion figure represents a fourteen-percent growth in a single year and does not include the explosion of free pornography.¹¹⁰

Enterprising amateurs outside the established adult industry have not failed to notice the kind of money being made online. Anyone ranging from

105. Covenant Eyes, Internet Pornography, http://www.covenanteyes.com/help_and_support/article/?a=150 (last visited May 13, 2008); see also N.Y. STATE DIV. OF CRIM. JUSTICE SERVS., PORNOGRAPHY—DANGERS: ACCESS BY CHILDREN TO PORNOGRAPHY, http://criminaljustice.state.ny.us/missing/i_safety/porn_dangers.htm.

106. Press Release, Center for Internet Addiction and Recovery, N2H2 Reports Number of Pornographic Web Pages Now Tops 260 Million and Growing at an Unprecedented Rate (Sept. 23, 2003), http://www.netaddiction.com/newspr/n2h2_2003.htm.

107. Covenant Eyes, *supra* note 105.

108. See Gary Strauss, *Cellphone Technology Rings in Pornography in USA*, USA TODAY, Dec. 13, 2005, at 1D, available at http://www.usatoday.com/tech/products/services/-2005-12-12-pornography-cellphones_x.htm.

109. Jerry Ropelato, Internet Pornography Statistics, Top Ten REVIEWS, <http://internet-filter-review.toptenreviews.com/internet-pornography-statistics.html> (last visited May 13, 2008) (including a note on the difficulty in definitively quantifying the industry); see *infra* text accompanying notes 126-127 (noting the abundance of free pornography websites, which do not contribute to this amount).

110. See Claire Hoffman, *Obscene Losses*, CONDÉ NAST PORTFOLIO.COM, Nov. 2007, <http://www.portfolio.com/culture-lifestyle/culture-inc/arts/2007/10/15/YouPorn-Vivid-Entertainment-Profile>.

accountants, chefs, and shoemakers can now enjoy the economic rewards and help expand the market using a program such as SexBankRoll,¹¹¹ described below. One way to get a share of the cash is to purchase a service that (1) sets up a webpage with a suggestive name, and (2) finds advertisers who will pay “per hit” to put ads and links on the page. The purchasers, or “affiliates,” then “stock” the webpage with thumbnail clips from an advertiser’s product or, better yet, new and fresh pornographic images of themselves, their friends, or anyone willing to donate images or accept pay to model. The advertisers pay for the exposure, and pay more if a viewer uses a link on such a page to access the advertiser’s commercial site. The webmaster service and the moonlighting pornographer then split the profits.

The following is a news report in an adult industry trade magazine that discusses just one of the many schemes to increase the availability of pornographic images and the number of consumers:

SexBankRoll launched with seven non-exclusive membership sites. The program promised to add a *new site to its network each week*. SexBankRoll’s opening roster of domains includes BarePuss.com, YouGangBang.com, 18OnCam.com, HentaiPlus, BumBuds.com, VoyeurCampus.com and GrannyPlayground. Each site offers *hardcore content* and will be updated weekly.¹¹²

Affiliates may choose between revenue sharing or a fixed \$30-per-join program.¹¹³ “SexBankRoll offers a suite of sales and marketing tools that includes banners, FPAs, HPAs and free hosted galleries.”¹¹⁴ SexBankRoll’s Affiliate Sales and Marketing Manager calls this program “monetiz[ing] traffic.”¹¹⁵ It incentivizes the redirection of Internet traffic to paid pornographic sites. The program prides itself on its ability to “increase conversion ratios.”¹¹⁶ That means “funneling” web surfers who are merely observing the content “toward the action they’re supposed to perform: signing up for an account, giving their email address for future newsletters or referring a friend to the site. If they’re left gazing at the scenery—or, even worse, recoiling from it in disgust—your wallet will suffer.”¹¹⁷

Unfortunately, such programs increase the percentage of the population invested in resisting pornography regulation because it allows more amateurs to create porn. This use of amateurs increases the risks of exploi-

111. Steve Javors, *SexBankRoll Affiliate Program Debuts*, XBIZ, Sept. 2, 2006, http://xbiz.com/news/news_piece.php?id=17026&mi=all&q=steve+javors. For information on other such “Affiliate Programs” see (or, rather, don’t) XBIZ, <http://xbiz.com/directory/id=18&pid=1> (last visited May 13, 2008).

112. Javors, *supra* note 111 (emphasis added).

113. *Id.*

114. *Id.*

115. *Id.*

116. *Id.*

117. Domenic Merenda, *Keys to CONVERSIONS*, XBIZ, Jan. 4, 2006, <http://www.xbiz.com/articles/12550/conversions>.

tation, or at least, the number exposed to pornographic conduct and lifestyle. And it serves to increase the net amount of pornography available to be discovered by children in an unregulated environment.

b. Easier

Pornography is now more widely available than ever, especially to young people.¹¹⁸ The easy accessibility of the Internet means that many who would never have sought it out before consume it regularly. Children who curiously type body part phrases into search engines are almost immediately inundated with graphic, live-action sexual acts beyond anything their parents could have accessed twenty years ago.

Both the quantity and reach of pornography have vastly expanded within the last five years. The study published in the *Journal of the American Pediatric Association* found that approximately seventy percent of teens online have stumbled onto pornographic websites.¹¹⁹ In twenty-six percent of the instances where youth inadvertently found pornographic websites, they were unable to exit the site without being sent to another sex website.¹²⁰

Children no longer need to “borrow” a credit card to access adult material. The cost associated with accessing particularly graphic pornography online was once a deterrent for children without credit cards. Today free, easy-to-access pornography posted by “amateurs” is so commonplace on the Internet that it threatens the revenues of the commercial adult web sites.¹²¹ Luke Ford, an industry commentator, observes: “There is a ton of free stuff floating around and the amateur stuff—people filming themselves in their bedrooms and posting it online—it is not going to go away. It will just keep growing.”¹²² Commercial pornographers struggle to keep up. “It’s a battle on several fronts as adult content producers struggle to make sales in a mar-

118. Cheryl Wetzstein, *Porn on the Web Exploding: Foes Fear Greater Risk to Children*, WASH. TIMES, Oct. 9, 2003, at A2, available at <http://www.washington-times.com/culture/20031008-091303-3380r.htm>. For a general discussion and overview, see Richard Whitney Johnson, *Trademark for Creating a Kid-Friendly Cyberplayground on the Internet*, 2006 UTAH L. REV. 465.

119. See Janis Wolak et al., *Unwanted and Wanted Exposure to Online Pornography in a National Sample of Youth Internet Users*, 119 PEDIATRICS 247, 254-56 (2007).

120. See Kimberly J. Mitchell et al., *The Exposure of Youth to Unwanted Sexual Material on the Internet: A National Survey of Risk, Impact, and Prevention*, 34 YOUTH & SOC’Y 330, 342 (2003).

121. Marcus Baram, *Free Porn Threatens Adult Film Industry*, ABC NEWS, June 11, 2007, <http://abcnews.go.com/Business/Story?id=3259416&page=1> (reporting an increase in free pornography); Stephen Yagielowicz, *Adult Industry Grapples with Free Porn*, XBIZ NEWS, Jan. 18, 2008, <http://www.xbiz.com/news/89102> (reporting an increase in free pornography and piracy of copyrighted pornographic material).

122. Baram, *supra* note 121.

ket saturated with freely distributed, nefariously pirated, and—all too often—continually traded porn.”¹²³

Most significantly, filters are becoming *part* of the problem by posing as an effective solution, luring the public (and the courts¹²⁴) into thinking children are safe from increasingly graphic images when they are not. In the face of a massive, lucrative, and aggressive industry, individual Internet users do not stand a chance.

c. Better (Or Worse?)

The Internet has radically increased the volume of available hard core pornographic material and, thus, ratcheted up the type of porn people can easily find.¹²⁵ Moreover, the improved technologies have “enhanced” the visual effects and thus the impact of the pornography.¹²⁶ The percentage of degrading, violent, misogynistic pornography continues to increase, and the images are more readily available than ever.¹²⁷ Now, in part, because ama-

123. Yagielowicz, *supra* note 121.

124. *See, e.g.*, *ACLU v. Gonzales*, 478 F. Supp. 2d 775, 813-16 (E.D. Pa. 2007) (arguing that COPA can be found unconstitutional because filters are an effective and less restrictive alternative).

125. Donna M. Hughes, *The Use of New Communications and Information Technologies for Sexual Exploitation of Women and Children*, 13 HASTINGS WOMEN'S L.J. 127, 138 (2002).

126. *See, e.g.*, Ming-Ho Hsiao et al., *Content-Aware Video Adaptation Under Low-Bitrate Constraint*, 2007 EURASIP J. ON ADVANCES IN SIGNAL PROCESSING 1, 1-2, available at <http://portal.acm.org/citation.cfm?id=1317068&dl=GUIDE&coll=GUIDE&CFID=78562-23&CFTOKEN=12574855> (describing how certain technological adjustments provide for “better visual perceptual quality”); Ioana M. Martin, *ARTE—An Adaptive Rendering and Transmission Environment for 3D Graphics*, in PROCEEDINGS OF THE EIGHTH ACM INTERNATIONAL CONFERENCE ON MULTIMEDIA 413 (2000), available at <http://delivery.acm.org/10.1145/380000/376299/p413-martin.pdf?key1=376299&key2=2118-487021&coll=GUIDE&dl=GUIDE&CFID=63271685&CFTOKEN=48090354>; Surendar Chandra et al., *Multimedia Web Services for Mobile Clients Using Quality Aware Transcoding*, in PROCEEDINGS OF THE SECOND ACM INTERNATIONAL WORKSHOP ON WIRELESS MULTIMEDIA 99 (1999), available at <http://delivery.acm.org/10.1145/320000/313287/p99-chandra.pdf?key1=313287&key2=0148487021&coll=GUIDE&dl=GUIDE&CFID=63272134&CFTOKEN=65031040>. For instance, broadband proliferation (ironically called “broadband penetration”) was a necessary prerequisite to interactive (streaming) video porn. MPEG-4 was beginning to be discussed in 1996, and introduced in 1997. Thomas Sikora, *The MPEG-4 Video Standard Verification Model*, 7(1) IEEE TRANSACTIONS ON CIRCUITS & SYS. FOR VIDEO TECH. 19 (1997), available at <http://ieeexplore.ieee.org/iel4/76/12074/005-54415.pdf?isnumber=12074&prod=JNL&arnumber=554415&arSt=19&ared=31&arAuthor=Sikora%2C+T>.

127. Hughes, *supra* note 125, at 138.

teur pornographers may post videos and images in which no one can determine the age of the subject, it is easier to publish child pornography.¹²⁸

Child pornography has experienced a surge of production with new technology.¹²⁹ The commercial interest in child pornography was renewed when it began to appear online. “If a pornographer can get a thousand people . . . to sign up for a child pornography bulletin board system, charge them \$85 a year, . . . he can make fairly painless \$85,000 [with overhead of m]aybe \$3,000 to \$4,000.”¹³⁰ The Internet has increasingly low production costs, low distribution costs, and high levels of anonymity for producers and consumers.¹³¹ Pornographers who wish to make money through the abuse and exploitation of children now have much greater opportunity.¹³²

In addition, Internet technologies have made it easier to access and purchase pornography. Adult marketing companies have developed advertising techniques and technologies designed specifically to “increase conversions” with new and different, more exciting marketing and delivery.¹³³ The president of a prominent pornography marketing company puts it this way: “Fresh ideas are what converts in this industry New paysite themes people haven’t seen before are what bring the surfers in We go out on the edge to produce something amazing, and it works.”¹³⁴ Options that allow users to remain anonymous are particularly popular.¹³⁵

Over the last decade, the Internet’s accessibility has ushered in a new era of startlingly graphic pornography where nothing is off limits. An average person—including a teenager—”with a computer, modem and search engine can find violent, degrading images within minutes, a search that could have taken a lifetime, just fifteen years ago.”¹³⁶

Internet technologies have also “enhanced” the porn experience: software developers are constantly racing to develop ways to deliver fast,

128. Hoffman, *supra* note 110 (“If anonymous users post child pornography, it could be difficult for site owners to verify the ages of the performers. . . . Up to now, U.S. user-generated porn sites have not been prosecuted.”).

129. Symposium Panel Discussion, *Panel II: Censorship on the Internet: Do Obscene or Pornographic Materials Have a Protected Status*, 5 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 235, 298-99 (1995) (comments of J. Robert Flores describing the increase in child pornography).

130. *Id.*

131. *Id.*

132. *Id.*

133. Merenda, *supra* note 117 (quoting a pornography marketing executive).

134. *Id.*

135. *SexDateNetwork Increases CONVERSIONS with NetCash*, XBIZ, Mar. 5, 2007, http://www.xbiz.com/news/news_piece.php?id=19936&mi=all&q=conversions (illustrating how the greater anonymity afforded by the NetCash application leads to a greater number of people willing to “convert”).

136. Hughes, *supra* note 125, at 138.

cheap, and high-definition visual experiences on the Internet.¹³⁷ “The increase in video clips with audio and streaming video makes the action (and harm) come alive. New techniques, such as shockwave flash movies, enable the creation of animated videos. Skilled amateurs can create snuff films for distribution on the Web.”¹³⁸ As one Internet user explained: “[W]ith virtual film, it is possible to produce a snuff film from animation, but very difficult to tell it is not real. Now, we are limited only by our imaginations. There is nothing that can’t happen on the Web.”¹³⁹

4. ICANN and the Hot Potato Toss

In spite of its seeming lack of centralization or governance structure, the Internet relies on a central domain name system.¹⁴⁰ Whoever controls domain names, addresses, and routing numbers on the Internet, and how these are assigned, has the power to decide the terms on which the Internet root is accessed.¹⁴¹ The U.S. government played a crucial role in the early development of the Internet, particularly with financing the development of the intellectual property and infrastructure.¹⁴² It (directly and indirectly) “helped make the Internet the largest, most robust information commons in human history.”¹⁴³ Thus, it was the trustee of what became one of the most significant public commons ever known. Unfortunately, without waiting for a clear vision of the future of the Internet and its implications for political, social, and moral dominion, the U.S. government largely punted power over this resource to a private controller in 1999.¹⁴⁴ Thus, it may have compromised not only the “open . . . architecture of the Internet . . . [but] replace[d] [it] with proprietary control[.]”¹⁴⁵ without fully appreciating the content and enforcement issues that were sure to arise. A tech-savvy Congress in 1995 might have addressed these issues in a more thoughtful way. The diversion of the CDA, and its demise, perhaps masked the extent to which the problems would not self-resolve, but instead become bigger and more unmanageable.

137. Peter Svensson, *Startups Rush to Pave Way for Web Video*, MSNBC, Jan. 28, 2008, <http://www.msnbc.msn.com/id/22879683/> (discussing the current developments in high definition video technology on the Internet and its potential uses by start-up companies).

138. Hughes, *supra* note 125, at 138 (internal citations omitted). A “snuff film” is one that depicts the actual killing of a human being.

139. *Id.* (quoting Interview by Computer Focus with Jeff Middleton (May 17, 2001)).

140. See ICANN, What is the Domain Name System?, <http://www.icann.org/tr/english.html> (last visited May 13, 2008).

141. *Id.*

142. *Id.*

143. DAVID BOLLIER, PUBLIC ASSETS, PRIVATE PROFITS: RECLAIMING THE AMERICAN COMMONS IN AN AGE OF MARKET ENCLOSURE iv (2001).

144. See *id.*

145. *Id.*

As the Internet began its exponential growth in the late 1990s, the management of the Internet naturally became more and more difficult.¹⁴⁶ In June 1998, the executive branch of the federal government and the National Telecommunications and Information Administration (NTIA) in the Department of Commerce (DoC) issued a *Statement of Policy: Management of Internet Names and Addresses* (the White Paper).¹⁴⁷ It directed the DoC to create a private nonprofit corporation to take over the domain name system.¹⁴⁸ Four months later, the DoC granted a private California corporation, the International Corporation for Assigned Names and Numbers (ICANN), authority over management of the Internet root.¹⁴⁹ Over the next two and a half years, ICANN defined and distributed property rights in the domain name industry, “transform[ing] [the] administration of the D[omain] N[ame] S[ystem] root into the platform for . . . governance of the Internet.”¹⁵⁰

Gradually, the DoC, through the NTIA, has been cutting the remaining strings that connect Internet governance to the government of the people. In July 2006, the U.S. government announced it was divesting itself of major facets of government control of this essential public utility.¹⁵¹ The NTIA website lists its responsibilities with respect to the Internet.¹⁵² Expressly included are the issues of “Internet Governance” and “Protecting Children On-Line.”¹⁵³ Since the failure of dot.kids,¹⁵⁴ there is no evidence that NTIA, or its charge, ICANN, has done anything to meet this obligation of protecting children online.

146. MILTON L. MUELLER, RULING THE ROOT: INTERNET GOVERNANCE AND THE TAMING OF CYBERSPACE 105-40 (2002) (detailing the complex interplay of Internet stakeholders during this period); Harold Feld, *Structured to Fail: ICANN and the “Privatization” Experiment*, in WHO RULES THE NET?: INTERNET GOVERNANCE AND JURISDICTION 343-45 (Adam Thierer & Clyde Wayne Crews, Jr. eds., 2003) (describing some of the complications introduced by trademark holders who claimed a right over various domain names).

147. Management of Internet Names and Addresses, 63 Fed. Reg. 31,741 (June 10, 1998).

148. *Id.* at 31,744.

149. ICANN, What is ICANN?, <http://www.icann.org/tr/english.html> (last visited May 13, 2008).

150. MUELLER, *supra* note 146, at 185 (describing the transformation between 1999 and 2001 and the essential features of the new property system).

151. See A. Michael Froomkin, *Wrong Turn in Cyberspace: Using ICANN to Route Around the APA and the Constitution*, 50 DUKE L.J. 17, 27-28 (2000) (“If . . . ICANN is making its policy decisions independently of DoC, . . . then even a partial transfer of DoC’s policymaking authority over the DNS violates an even more fundamental public policy against the arbitrary exercise of public power, the constitutional doctrine prohibiting the delegation of public power to private groups.”).

152. Nat’l Telecomm. & Info. Admin., NTIA Issues, <http://www.ntia.doc.gov/issues.htm> (last visited May 13, 2008).

153. *Id.*

154. See Preston, *Zoning the Internet*, *supra* note 103, at 1461-62.

The somewhat covert transfer to ICANN was, and is, the subject of much controversy. For instance, ICANN was formed as a non-profit organization, but the members of its board of directors are intimately connected with Internet industrial giants.¹⁵⁵ The economic interests, those who profit through ICANN-accredited Registries and Registrars, ISPs, and especially the intellectual property owners (i.e., holders of valuable trademarks and copyrights), continue to dominate the functioning of ICANN.¹⁵⁶ Another issue in regards to Internet management is the constitutionality of giving away the government's obligation to supervise the Internet. Michael Fromkin argues that the "delegation [to ICANN] violates the nondelegation doctrine and raises major due process concerns. These constitutional concerns are substantially magnified by the absence of a clear congressional pronouncement authorizing the handing over, even on a trial basis, of policymaking authority over the root."¹⁵⁷

This Article lacks room for a complete treatment of the history of the domain name system and the evolution of ICANN, let alone an evaluation of ICANN's performance or the extent to which it remains useful in addressing the plague of Internet pornography. Important here is the issue of whether the already controversial transfer might have been better evaluated in light of a clearer governmental vision of the Internet and a settled mandate to protect children.

III. THE RISKS OF WORKING DIRECTLY IN STONE

Another unfortunate legacy of the Supreme Court's response to the CDA is the Court's treatment of the 1978 precedent permitting regulation of indecency on radio and television, *FCC v. Pacifica Foundation*.¹⁵⁸ In *Pacifica*, the Supreme Court held that the nature of these media justified a lesser standard, only intermediate scrutiny, when challenged on First Amendment grounds. The Court in *Pacifica* held that "broadcast media have established a uniquely pervasive presence in the lives of all Americans."¹⁵⁹ Because of this pervasiveness, "[p]atently offensive, indecent material presented over the airwaves confronts the citizen, not only in public, but also in the privacy of the home, where the individual's right to be left

155. For example, Vint Cerf, the prior chairman of the board, was before, and is after, his term as chair an officer of Google. ICANN, Biographical Data on Vinton G. Cerf, <http://www.icann.org/biog/cerf.htm> (last visited May 13, 2008).

156. See EDUARDO GELBSTEIN & JOVAN KURBALIJA, INTERNET GOVERNANCE: ISSUES, ACTORS AND DIVIDES 81 (2005) ("So far, copyright holders, represented by the major record and multimedia companies, have been more proactive in protecting their interests. The public interest has only been vaguely perceived and not sufficiently protected.").

157. Fromkin, *supra* note 151, at 142-43.

158. 438 U.S. 726 (1978).

159. *Id.* at 748.

alone plainly outweighs the First Amendment rights of an intruder.”¹⁶⁰ Second, “broadcasting is uniquely accessible to children, even those too young to read.”¹⁶¹ Third, “[b]ecause the broadcast audience is constantly tuning in and out, prior warnings cannot completely protect the listener or viewer from unexpected program content.”¹⁶²

A tech-savvy *Reno I* Court with a vision of what the Internet would, within a decade, mean for the every-day lives of Americans, even preschoolers, might have been more troubled about the applicability of these descriptions to the Internet.

Rather, the Court in *Reno I* distinguished the radio from the Internet, stating that the CDA “applies to a medium that, unlike radio, receives full First Amendment protection”¹⁶³—without so much as a “so far.” Relying on the trial court findings, the Court then stated:

Unlike communications received by radio or television, “the receipt of information on the Internet requires a series of affirmative steps more deliberate and directed than merely turning a dial. A child requires some sophistication and some ability to read to retrieve material and thereby to use the Internet unattended.”¹⁶⁴

These statements purport to declare the “essence” of the Internet for 1997, and forever.¹⁶⁵ They evidence little understanding of the whirling dervish that the Court had caught sight of only briefly in the beginning of a frenzy of growing and becoming.

In some respects the CDA is obviously distinguishable from the regulation at issue in *Pacifica*. The *Reno I* Court rightly noted that the regulation upheld in *Pacifica* did not carry criminal penalties.¹⁶⁶ Because obtaining the opportunity to broadcast on the radio or television requires substantial economic resources, the FCC’s power to revoke a license, as well as the power to impose hefty fines, is more than sufficient to encourage compli-

160. *Id.* (citing *Rowan v. U.S. Post Office Dept.*, 397 U.S. 728 (1970)).

161. *Id.* at 749.

162. *Id.* at 748.

163. *Reno v. ACLU (Reno I)*, 521 U.S. 844, 845 (1997). *See also id.* at 867 (“[Television is] a medium which as a matter of history had ‘received the most limited First Amendment protection,’ in large part because warnings could not adequately protect the listener from unexpected program content. The Internet, however, has no comparable history.” (quoting *Pacifica*, 438 U.S. at 748)).

164. *Id.* at 854 (quoting *ACLU v. Reno*, 929 F. Supp. 824, 845 (1996)).

165. *See LESSIG, supra* note 11, at 217 (“The findings, for the most part, were exceptionally good descriptions of where cyberspace was in 1996. But they did not tell us anything about where cyberspace is going or *what it could be*. The courts spoke as if they were telling us about the *nature* of cyberspace, but as we’ve seen, cyberspace has no intrinsic nature. It is as it is designed. By striking down Congress’s efforts to zone cyberspace, the courts were not telling us what cyberspace *is* but what it *should be*. They were making, not finding, the nature of cyberspace; their decisions are in part responsible for what cyberspace will become.”).

166. *Reno I*, 521 U.S. at 867-68.

ance if the regulations were rigorously enforced. Moreover, *Pacifica* was distinguishable because it did not involve a complete ban on merely “indecent” content, which can be broadcast after prime time.¹⁶⁷ The Court thus argued that the regulation in *Pacifica* was more closely aligned to a time, place, and manner restriction.

Beyond these distinctions, however, the *Reno I* Court relied on three arguments to divide the Internet from pre-existing broadcast media and thus dismiss the precedent of *Pacifica*.¹⁶⁸ I will discuss them in this order: (1) television and radio are invasive communications media;¹⁶⁹ (2) television and radio have a long history of regulation;¹⁷⁰ and (3) radio and television broadcast frequencies are scarce, and their use requires licenses.

Of course, the *Reno I* Court’s conclusions, especially with respect to invasiveness, were more persuasive in 1997 than they are in 2008. But is it not likely that a truly tech-savvy Court in 1997 would have better understood the nature of the beast even then? The Internet is now equally or more “pervasive” and “invasive” than radio and television in American life.

The Internet is available with a flip of a switch and a click, not only in homes, but in public through WiFi hotspots; in every school and virtually every business; and on portable personal web-enabled devices such as video phones, Blackberries, and Portable Play Station game systems.¹⁷¹ Although portable radios on the street were once popular, they have virtually disappeared. Almost no one relied much on a portable television, even in 1997.

Moreover, the Internet is now in nearly as many homes as is television, and likely in many more homes than those with a traditional radio that still works. As of September 29, 2007, 1,398,883 IP addresses were as-

167. *Pacifica*, 438 U.S. at 750 (specifically limiting the holding to broadcast during daytime hours when children are likely to be listening to the radio).

168. *Reno I*, 521 U.S. at 869-70. This position was reiterated in *Ashcroft v. ACLU*, 535 U.S. 564, 604 (2002) (Stevens, J., dissenting).

169. *Reno I*, 521 U.S. at 845 (citing *Sable Commc’ns of Cal., Inc. v. FCC*, 492 U.S. 115, 128 (1989)).

170. *Id.* (citing *Red Lion Broad. Co. v. FCC*, 395 U.S. 367, 399-400 (1969)).

171. ABI Research, a technology market analysis company, estimates that “by 2012, 90 million MIDs [mobile Internet devices] will ship. MID customers will include Lifestyle Boomers, Gen Y Social Networkers, Young Gamers, Frugal Generalists, and Multimedia Enthusiasts.” ABIResearch, *Mobile Internet Devices and UMPCs*, Feb. 29, 2008, http://www.abiresearch.com/products/market_research/Mobile_Internet_Devices_and_UMPCs. For examples, see Jo Best, *Nokia Tops in 2006 Smartphone Sales*, BUSINESS WEEK, Feb. 27, 2007, available at http://www.businessweek.com/globalbiz/content/feb2007/gb20070227_008389.htm (calling 2006 “the year of the converged device” and reporting 80 million “smart phones” shipped worldwide); Press Release, Apple Inc., Apple Sells One Millionth iPhone (Sept. 10, 2007), <http://www.apple.com/pr/library/2007/09/10iphone.html> (explaining that Apple sold its millionth iPhone just seventy-four days after its introduction).

signed in the U.S.¹⁷² Comcast has 13.2 million Internet subscribers.¹⁷³ AOL claims 12 million subscribers.¹⁷⁴ Cox claims over 6 million.¹⁷⁵ Nielsen/NetRatings estimated that there were more than 212 million Internet users in the United States in August 2007.¹⁷⁶ A person with a television and a telephone can do some kinds of shopping, research, and learning, as well as be entertained. People with a web-enabled device can now do every kind of shopping, their work, nearly all of their research (especially homework), their reading, their radio listening, and can even watch television, either by downloading shows through programs such as iTunes or on network websites, all on the Internet. Watching television or listening to the radio, even with earphones, is frowned upon in my class and in business meetings. Internet use is rampant.

A recent IBM consumer study showed that in 2007 the Internet and television were about equal in terms of pervasiveness in American homes.¹⁷⁷

Among consumer respondents, 19 percent stated spending six hours or more per day on personal Internet usage, versus nine percent of respondents who reported the same levels of TV viewing. 66 percent reported viewing between one to four hours of TV per day, versus 60 percent who reported the same levels of personal Internet usage.¹⁷⁸

Radios are infrequently used in schools; television and movies are more common but not regular events. Internet use, however, including Internet training, is often critical in schools. From the spring of 1997 to the spring of 2006, radio listening time declined fifteen percent with “the erosion [being] evident with most demographic groups except [adults age sixty-five and older].”¹⁷⁹ Even then the vast majority of radio listening occurs in cars during commute hours and at work.¹⁸⁰ Of all minors (defined in the CDA as

172. See BGP Expert, <http://www.bgpexpert.com/addressespercountry.php> (last visited May 13, 2008). S. REP NO. 108–102, at 2 (2003) (indicating that 140 million Americans have and use e-mail).

173. Comcast Press Room, Corporate Overview, <http://www.comcast.com/corporate/about/pressroom/corporateoverview/corporateoverview.html> (last visited May 13, 2008).

174. TimeWarner, AOL, Highlights, <http://www.timewarner.com/corp/businesses/-detail/aol/index.html> (last visited May 13, 2008).

175. Cox Communications, About Cox, <http://www.cox.com/about/> (last visited May 13, 2008).

176. See Nielsen/Net Ratings, Resources, <http://www.nielsen-netratings.com> (last visited May 13, 2008).

177. See Press Release, IBM, IBM Consumer Survey Shows Decline of TV as Primary Media Device (Aug. 22, 2007), <http://www.ibm.com/press/us/en/pressrelease/22206.wss>.

178. *Id.*

179. ARBITRON, RADIO TODAY: HOW AMERICA LISTENS TO RADIO 9 (Ron Rodrigues ed., 2007), <http://www.arbitron.com/downloads/radiotoday07.pdf>. “*Radio Today* combines Scarborough consumer data with Arbitron audience data to develop a comprehensive profile of radio listening across America.” *Id.* at 3.

180. *Id.* at 92-93, 96.

children under age seventeen), the only ones who are in a car without an adult or who have independent work are those who are age sixteen; thus all others fell outside the common range of radio listening in 2006: at home, the listening “rating of Teen boys and girls is down 12% to 13% over these four years” between 2002 and 2006.¹⁸¹ While online games and sites targeted at preschoolers are common on the Internet,¹⁸² children younger than “Teen” are not even acknowledged in the radio market studies. Moreover, what is most disturbing about the presence of very young children on the Internet is the extent to which web publishers mix on the same page content targeted to young children, say Mario Brothers, a Scooby-Do game, or Aqua Field, and XXX Puzzle Game (the pieces make up a nude woman with legs spread) or any number of other adult titles with adult images.¹⁸³

Nationwide, educators and government are committed to promoting education in and the use of technology in the classroom¹⁸⁴ (although many teachers are battling with too much unauthorized Internet use during school). Children are getting technology training at younger and younger ages in schools. The Educational Testing Service is considering standardized testing for computer literacy.¹⁸⁵ As far as the Internet being “uniquely

181. *Id.* at 95.

182. *See, e.g.*, Thomas & Friends Home Page, <http://www.thomasandfriends.com/usa/index.asp?origref=> (last visited May 13, 2008); Sesame Street Home Page, <http://www.sesameworkshop.org/sesamestreet/> (last visited May 13, 2008); Mister Rogers' Neighborhood Home Page, <http://pbskids.org/rogers/> (last visited May 13, 2008); Teletubbies Home Page, <http://pbskids.org/teletubbies/noflash/index.html> (last visited May 13, 2008); Kaboose Preschool Games, <http://funschool.kaboose.com/preschool/index.html> (last visited May 13, 2008); Dora the Explorer Home Page, <http://www.nickjr.com/shows/dora/index.jhtml> (last visited May 13, 2008); Go Diego Go Home Page, <http://www.nickjr.com/shows/diego/index.jhtml> (last visited May 13, 2008).

183. Gobossy.com: Online Flash Games, <http://www.gobossy.com/> (last visited May 13, 2008). Moreover, go to this site and click on the game you think most targeted to the very youngest audience and brace for the top of the linked page. At this site, hit refresh repeatedly to see an endless array of new game combinations, always including (with visuals) adult games and gambling, as well as kids' games.

184. For instance, President Clinton committed to have the federal government promote technology in the classroom through the donation of old computers. Exec. Order No. 12999, 15 C.F.R. 1160, *reprinted as amended in* 15 U.S.C. § 3710(i). Information about the current program is available at the program's website: Computers for Learning—Homepage, <http://computersforlearning.gov/> (last visited May 13, 2008). In 2005, the U.S. Department of Education released a technology plan discussing how to better utilize the Internet in American schools. U.S. DEPT. OF EDUC., TOWARD A NEW GOLDEN AGE IN AMERICAN EDUCATION: HOW THE INTERNET, THE LAW AND TODAY'S STUDENTS ARE REVOLUTIONIZING EXPECTATIONS (2005), <http://www.ed.gov/about/offices/list/os/technology/plan/2004/plan.pdf>. For general data on public schools and the teaching of Internet and technology skills, see U.S. Dept. of Educ., Nat'l Ctr. for Educ. Statistics, Fast Facts, <http://nces.ed.gov/fast-facts/display.asp?id=46> (last visited May 13, 2008).

185. Guzman, *supra* note 19.

accessible to children.”¹⁸⁶ If you are stuck in some tricky Internet quicksand, and the choices are the resident teenager or a sixty-something judge, “who ya gonna call?”¹⁸⁷

Even more to the point, in practice, the supposed barriers to children’s access to the Internet have proved to be less than a speed bump.¹⁸⁸ The February 2007 issue of *Pediatrics*, the official magazine of the American Academy of Pediatrics, reported a 2005 study of fifteen hundred children between the ages of ten and seventeen.¹⁸⁹ It found that “[f]orty-two percent of youth Internet users had been exposed to online pornography in the past year.”¹⁹⁰ Of those, “66% reported only unwanted exposure,” meaning they stumbled into sexual images unintentionally.¹⁹¹ The others were looking for it.

Second, the Court distinguished *Pacifica* because of the long history of regulation imposed on radio and television. Of course, in 1997, radio and television had a long history of regulation. But how do these regulation times compare to the Internet? How much longer has the Internet enjoyed the unregulated frontier than did the media covered in *Pacifica*?

Nikola Tesla first publicly demonstrated key elements of radio technology in 1893.¹⁹² Guglielmo Marconi sent and received his first radio signal in 1895.¹⁹³ In 1899, he flashed a wireless signal across the English Channel.¹⁹⁴ Radio proved to be an effective mode of communication for rescuers after sea disasters occurred.¹⁹⁵ Around the turn of the century, numerous ocean liners installed radios.¹⁹⁶ Between 1899 and 1902, the U.S. Navy made its first radio system tests.¹⁹⁷ Marconi transmitted President

186. FCC v. *Pacifica Found.*, 438 U.S. 726, 749 (1978).

187. RAY PARKER, JR., *Ghostbusters*, on GHOSTBUSTERS, ORIGINAL SOUNDTRACK ALBUM (Arista 1984).

188. For a more in-depth discussion of filters, see Preston, *Zoning the Internet*, *supra* note 103, at 1451-56.

189. See Wolak et al., *supra* note 119.

190. *Id.* at 247.

191. *Id.*

192. IEEE, *Nikola Tesla, 1856-1943*, http://www.ieee.org/web/aboutus/history_center/biography/tesla.html.

193. Thomas H. White, *Early Radio Industry Development (1897-1914)*, in UNITED STATES EARLY RADIO HISTORY, <http://earlyradiohistory.us/sec006.htm> [hereinafter RADIO HISTORY].

194. Thomas H. White, *Marconi’s Wireless Telegraph (1899)*, in RADIO HISTORY, *supra* note 193.

195. Thomas H. White, *Radio at Sea (1891-1916)*, in RADIO HISTORY, *supra* note 193.

196. Federal Communications Commission (FCC), *The Ideas that Made Radio Possible*, in HISTORY OF COMMUNICATIONS—RADIO, Nov. 21, 2005, <http://www.fcc.gov/omd/history/radio/ideas.html> [hereinafter HISTORY OF COMMUNICATIONS].

197. LINWOOD S. HOWETH, HISTORY OF COMMUNICATIONS—ELECTRONICS IN THE UNITED STATES NAVY 37-49 (1963), available at <http://earlyradiohistory.us/1963hw04.htm>.

Theodore Roosevelt's greeting to King Edward VII over the Atlantic by radio in 1903.¹⁹⁸ In 1904, *New York Times* reporters radioed home the first on-location news report during the battle of Port Arthur in the Russo-Japanese War.¹⁹⁹ By 1906, Reginald Fessenden was able to transmit the first radio audio broadcast, on Christmas Eve. He played his violin and read from the Bible.²⁰⁰ In 1907, Marconi formed the first American-European radiotelegraph service.²⁰¹

Five years after that point, Congress passed the Radio Act of 1912,²⁰² part of which "required that users of the radio spectrum uphold decency standards."²⁰³ Ever since, Congress has included a mandate for the executive branch to regulate decency on the airwaves.²⁰⁴ Television became prominent in America in the late 1950s.²⁰⁵ In 1962, Congress began to regulate television technology and broadcasts,²⁰⁶ and the same decency standards that applied to radio broadcasts applied, and still do, to television broadcasts.²⁰⁷

Thus, it took the government time to implement regulations on radio and television following the spread of these media into common use. The Internet was granted no greater grace period. The National Science Foundation permitted the commercial use of the Internet in October 1992.²⁰⁸ Long before most Americans typed "www," the Exon/Gorton Communications Decency Act was introduced in the Senate on February 1, 1995.²⁰⁹ Even Microsoft ignored the Internet until 1995, when it finally introduced Internet

198. ARRL Web, *Special Event, Space Contact to Mark Marconi 1903 Transmission Centennial*, Dec. 23, 2002, <http://www.arrl.org/news/stories/2002/12/23/1/?nc=1>.

199. *Wireless Workers Back from the Scene of War*, N.Y. TIMES, Aug. 21, 1904, available at <http://earlyradiohistory.us/1904back.htm>.

200. HISTORY OF COMMUNICATIONS, *supra* note 196.

201. ThenRadio—Guglielmo Marconi, <http://www.thenradio.com/marconiguglielmo.html> (last visited May 13, 2008).

202. Pub. L. No. 62-264, 37 Stat. 302 (1912).

203. Keith Brown & Adam Candeub, *The Law and Economics of Wardrobe Malfunction*, 2005 BYU L. REV. 1463, 1471.

204. *See id.*; *see also* 18 U.S.C. § 1464 (2000) (empowering the FCC to regulate broadcast material as it has in 47 C.F.R. § 73.3999 (2006)).

205. Kingwood College Library, *American Cultural History 1950–1959*, <http://kclibrary.nhmccd.edu/decade50.html> (last visited May 13, 2008).

206. *See Wired, Zapped, and Beamed, 1960's through 1980's*, in HISTORY OF COMMUNICATIONS, *supra* note 196, <http://www.fcc.gov/omd/history/tv/1960-1989.html>.

207. 47 C.F.R. § 73.3999 (2006).

208. *See supra* note 2.

209. For the first time in 1995, "WWW surpass[e]d ftp-data in March as the service with greatest traffic on NSFNet [later known as the Internet] based on packet count, and in April based on byte count." Zakon, *supra* note 44. So literally, before many of us typed "www" on the Internet, the CDA was introduced in Congress on February 1, 1995. *See Communications Decency Act of 1995*, S. 314, 104th Cong.

Explorer.²¹⁰ Only “[a]fter 1995, every business was at least thinking about getting a Web site.”²¹¹ The Supreme Court seemed to underestimate the actual timing of radio and television regulation when comparing them to the Internet.

Moreover, pornography has been regulated for centuries. Is the proper comparison for a constitutional principle the history of Anglo-American jurisprudence on the problem of pornography,²¹² or the particular technological context in which the problem again arises? Because we have left something unregulated during a settlement and development stage, does that mean our hands are tied forever? With the American West, government regulation came after a century of open frontier.²¹³ Had the Court stepped back and humbly admitted that it did not know if the Internet would develop similarly to radio or television, harsh precedent could have been avoided and *Pacifica* could have been adequately distinguished on narrower grounds until the role of this medium became clearer.

Third, the *Reno I* Court relied on a distinction in scarcity to separate the Internet from existing broadcast media. “There is a scarcity of spectrum space,” according to the *Pacifica* Court, “the use of which the government must therefore license in the public interest.”²¹⁴ If multiple speakers choose to use the same frequency, their signals will interfere and nothing may be broadcast on that channel at all.²¹⁵ The Supreme Court reiterated this argu-

210. Robert X. Cringely, *Nerds 2.0.1: Wiring the World*, http://www.pbs.org/opb/nerds2.0.1/wiring_world/ (last visited May 13, 2008).

211. *Id.*

212. In the Anglo-American tradition, the express regulation of pornography began with the Obscene Publications Act, 1857, 20 & 21 Vict., c. 83 (Eng.). This was followed by *Queen (Regina) v. Hicklin*, (1868) 3 L.R.-Q.B. 360, which established that “[t]he test of obscenity is . . . whether the tendency of the matter . . . is to deprave and corrupt.” *Id.* at 371. This “Hicklin Rule” was cited in American cases in the 1800s and early 1900s. Robert Trager & Yuri Obata, *Obscenity Decisions in the Japanese and United States Supreme Courts: Cultural Values in Interpreting Free Speech*, 10 U.C. DAVIS J. INT’L L. & POL’Y 247, 256 (2004). The U.S. Tariff Act of 1842, ch. 270, § 28, 5 Stat. 566, was the first federal law restricting imports of lewd material in print. The Comstock Act of 1873, An Act for the Suppression of Trade in, and Circulation of, Obscene Literature and Articles of Immoral Use, ch. 258, 17 Stat. 598 (1873), followed and sought to outlaw pornography by making it a crime to send obscene publications through the mail. An Act for the Suppression of Trade in, and Circulation of, Obscene Literature and Articles of Immoral Use, ch. 258, 17 Stat. 598 (1873). The definition of “obscenity” was interpreted broadly until *Miller v. California*, 413 U.S. 15 (1973). Material falling within the lesser standard of “harmful to minors” is still regulated in the real world. *Ginsberg v. New York*, 390 U.S. 629, 631-32 (1966).

213. *See supra* text accompanying notes 6-10.

214. *FCC v. Pacifica Found.*, 438 U.S. 726, 731 n.2 (1978) (quoting *In re Citizen’s Compl. Against Pacifica Found. Station WBAI (FM), N.Y., N.Y.*, 56 F.C.C.2d 94, 97 (1975)).

215. *See Red Lion Broad. Co. v. FCC*, 395 U.S. 367, 389 (1969) (“It would be strange if the First Amendment, aimed at protecting and furthering communications, pre-

ment in *Turner Broadcasting*²¹⁶ and *Reno I.*²¹⁷ How scarce are radio channels? One model of a high quality portable radio can access radio stations around the world, with the capability of saving up to seventeen hundred preset stations.²¹⁸

The Internet does not present the identical scarcity problem.²¹⁹ The Internet is virtually limitless—but only from a *speaker's* perspective. When we focus not on the speaker, but on the *hearer*, the scarcity of the Internet becomes obvious. Hearers—Internet users—have only *one* Internet choice: all or nothing. Even print media, arguably the most unregulated of all mass media, does not present this lack of options to hearers. Parents who want a subscription to one magazine or newspaper, for instance, do not have to face the prospects of a dump on their driveway of all available magazines and newspapers. Parents would then have the responsibility to sort through them and remove offensive materials or make sure the kids do not go out to play and stumble on a XXX glossy. Giving consumers the choice of allowing every bit of Internet trash in their home (even if a child has to go to the bother of using a proxy site to reach it) is highly impractical and unfair. Parents don't have to refuse U.S. postal service to prevent the delivery in their mailboxes of indecent material.²²⁰ Certain conveniences—like bank accounts—have almost become a necessity, an entitlement, for modern life. For instance, most college students depend on the Internet as a daily necessity.²²¹ One study conducted early, in 1998, by America Online found, among other things, that sixty-seven percent of respondents would rather have access to the Internet than to a telephone or a television if stranded on

vented the Government from making radio communication possible by requiring licenses to broadcast and by limiting the number of licenses so as not to overcrowd the spectrum.”).

216. *Turner Broad., Inc. v. FCC*, 512 U.S. 622, 637-38 (1994) (“The scarcity of broadcast frequencies thus required the establishment of some regulatory mechanism to divide the electromagnetic spectrum and assign specific frequencies to particular broadcasters.”).

217. 521 U.S. 844, 868 (1997) (noting elements particular to broadcasting, including scarcity of available frequencies).

218. See, e.g., Universal Radio, Inc., Etón E1 XM, <http://www.universal-radio.com/catalog/portable/0101.html> (last visited May 13, 2008) (noting that the combination of AM, FM, shortwave, and XM Satellite radio features provides access to radio stations from all over the world).

219. See *Pacifica*, 438 U.S. at 731 n.2; *Turner Broad.*, 512 U.S. at 637-38; *Reno I.*, 521 U.S. at 868.

220. See 18 U.S.C. § 1463 (2000) (deeming materials with obviously indecent, lewd, lascivious, or obscene materials to be “unmailable”). For a discussion of the Pandering Mail Act, Postal Revenue and Federal Salary Act of 1967, 39 U.S.C. § 3008 (2000), see Preston, *Zoning the Internet*, *supra* note 103, at 1448.

221. Brandon Morgan, *Internet: The New Necessity*, YOUNG MONEY (2002), available at http://www.youngmoney.com/technology/internet/021210_02.

a desert island.²²² One economic commentator suggested, “America’s economic future requires every citizen have access to Internet resources, and full freedom to use them. . . . If you don’t have access you can’t contribute. And you can’t benefit, either.”²²³

Of course, there are filters. An in-box filter requires hearers to bear the unreasonable burden of researching filters’ quality and effectiveness, purchasing a filter, and installing and maintaining a sometimes intimidating, and always less than effective, electronic device. And then there are the problems with filters.²²⁴ First, filters underblock, failing to exclude pornography and sexually explicit materials.²²⁵ Second, filters overblock, blocking harmless or even useful content.²²⁶ Third, filters are expensive and technologically intimidating.²²⁷ Fourth, filter companies are unaccountable and may intentionally block information for reasons unrelated to decency.²²⁸ Finally, filters are hackable by children.²²⁹ Proxy sites and teen blogs teach children to get around filters and provide downloadable applications to do so.²³⁰ Of course, there are YouTube articles on the subject.²³¹

Parents could elect to purchase an access plan from an ISP that provides an ISP-level filter, like hiring a company to go through and sort the driveway garbage for you. ISP-level filters are harder to “hack;” however, proxies, the easy availability of unfiltered WiFi and mobile devices, and so forth, dilute their effectiveness. Thus, parents are left with no effective alternatives to the hard choice of Internet or not.

The First Amendment’s protection extends to a communication, to its sources, and to its recipients.²³² The rights protected are not only those of

222. Media Awareness Network, Statistics: Internet, Internet Necessity (U.S.), http://www.media-awareness.ca/english/resources/research_documents/statistics/internet/necessity_internet.cfm (last visited May 13, 2008).

223. Dana Blankenhorn, *The Internet Necessity*, CORANTE, Jan. 30, 2006, http://mooreslore.corante.com/archives/2006/01/30/the_internet_necessity.php.

224. See Preston, *Zoning the Internet*, *supra* note 103, at 1449 and accompanying citations.

225. See *id.* at 1449 and accompanying citations.

226. *Id.*

227. *Id.* at 1450 and accompanying citations.

228. *Id.*

229. *Id.* at 1451 and accompanying citations.

230. Stefanie Olsen, *Kids Outsmart Web Filters*, CNET NEWS.COM, Apr. 19, 2006, http://www.news.com/2009-1041_3-6062548.html?part=rss&tag=6062548&subj=news (noting that such sites as Proxify, Guardster.com, Proxy.org, and Freeproxy provide instructions and downloadable applications to circumvent Internet filters).

231. See, e.g., YouTube, BY Pass School Block Remote Access, <http://youtube.com/watch?v=TpXJbgzZ1yg> (last visited May 13, 2008); YouTube, How to By Pass Websense Filters, <http://youtube.com/watch?v=V-AvEC93A6M> (last visited May 13, 2008).

232. *Va. State Bd. of Pharmacy v. Va. Citizens Consumer Council, Inc.*, 425 U.S. 748, 756 (1976). See also Burt Neuborne, *Speech, Technology, and the Emergence of a*

the artists to their expression, but also those of the listeners to receive the expressions they want to hear.²³³ In *Stanley v. Georgia*, the Court reminded, “It is now well established that the Constitution protects the right to receive information and ideas.”²³⁴ The Supreme Court held, in *Frisby v. Schultz*, that “unwilling listeners may be protected when within their own homes.”²³⁵ In *Hill v. Colorado*, the Court reiterated: “The unwilling listener’s interest in avoiding unwanted communication has been repeatedly identified” and protected.²³⁶ Further, “[t]he right to avoid unwelcome speech has special force in the privacy of the home and its immediate surroundings.”²³⁷ The law protects the right to hear and see (or to avoid hearing and seeing) what one wishes in the privacy of one’s home.²³⁸

One cable and satellite provider boasts access to over three thousand channels from seventy-eight different countries.²³⁹ Hearers may choose among almost limitless packages that allow them to carefully pick what content they will allow in their homes. The Internet now offers no such choices, although it could if a channeling or zoning scheme, such as the CP80 Community Ports concept, were adopted.²⁴⁰ As goes the motto of one satellite TV provider, “more channels, more choices.”²⁴¹ In the meantime, the Internet options available to Americans are extraordinarily scarce.

And, moreover, it is not accurate to assume that the Internet is not regulated or subject to licensing. In 1997, the Internet was controlled, not just supervised, by the U.S. government, through the NTIA in the Department of Commerce. Even if this were not so, a kind of “license” is required before a web publisher is allocated a domain name or number and permitted to post a web page on the Internet.²⁴² Prior to ICANN’s formation in 1999, the strict gateway function of permitting access to the Internet through a

Tricameral Media: You Can’t Tell the Players Without a Scorecard, 17 HASTINGS COMM. & ENT. L.J. 17, 30-31, n.58 (1994) (“Entire categories of speech arose where the principal justification for First Amendment protection was the hearer’s right to know,” including corporate and commercial speech.).

233. Neuborne, *supra* note 232, at 30-31.

234. 394 U.S. 557, 564 (1969).

235. 487 U.S. 474, 485 (1988). In this case, the Court emphasized the sanctity of the home as a refuge from unwanted speech and upheld a speech restriction on that basis. *Id.* at 484-85, 488.

236. 530 U.S. 703, 716 (2000).

237. *Id.* at 717 (internal citation omitted).

238. For an in-depth discussion on this right from a privacy standpoint, see Preston, *Zoning the Internet*, *supra* note 103, at 1441-44 (including the application of the Do-Not-Call Registry regulations).

239. Satellite TV for PC, 2008 Elite Edition, <http://www.satellitettvtopc.com/> (last visited May 13, 2008).

240. See *supra* notes 103-04 and accompanying text.

241. Channel Choice Home Page, <http://www.channelchoice.net/> (last visited May 13, 2008).

242. See *supra* notes 140-41 and accompanying text.

domain name and number was performed by or under contract from the U.S. government.²⁴³

In a 1993 report and order adopting regulations pursuant to § 16(a) of the Public Telecommunications Act of 1992,²⁴⁴ the FCC stated various times that its regulations of indecent broadcasts were for the purpose of protecting not only parents' interest in ensuring the well-being of their children, but also "the government's independent interest in ensuring the well-being of minors[]" by "protecting children . . . from the harm of exposure to indecent broadcast materials."²⁴⁵ The Supreme Court, first in *Ginsberg v. New York*,²⁴⁶ and later in *Pacifica*,²⁴⁷ stated that "the government's [two-fold] interest in the 'well-being of its youth' and in supporting 'parents' claim to authority in their own household' justified the regulation of otherwise protected (in this instance, indecent) expression."²⁴⁸

Thus, FCC's "channeling program" that "properly accommodates the various interests of broadcasters, adults and parents[,]""²⁴⁹ withstood First Amendment scrutiny in *Pacifica*. In its rush to throw the baby out with the bathwater, the *Reno I* Court might have better anticipated how the developments in the Internet in a short time would reflect on their hasty disposal of the precedent of *Pacifica*.

IV. CONCLUSION: WHAT DOES THE ENVIRONMENT TELL US ABOUT THE FAILURE TO REGULATE?

The vehemence of the response to the CDA has left a lasting legacy. Internet pornography escaped government regulation with the failure of the CDA, but the ensuing freedom crippled the Internet in other ways. The Internet was vulnerable to being shaped and regulated by other entities. Sex and money have carved deep channels into the Internet environment that will require serious intervention and reclamation efforts.

If history tells us anything, frontiers and public commons do not fare well without government protection. The "seemingly limitless horizons" of Western ranching in the latter half of the nineteenth century collapsed in

243. For a detailed description of this process, see MUELLER, *supra* note 146, at 141-208; *see also* Froomkin, *supra* note 151, at 50-93.

244. Public Telecommunications Act of 1992, Pub. L. No. 102-356, §16(a), 106 Stat. 949, 954.

245. *In re Enforcement of Prohibitions against Broadcast Indecency* in 18 U.S.C. § 1464, 8 F.C.C.R. 704, 705 (1993).

246. 390 U.S. 629 (1968).

247. 438 U.S. 726 (1978).

248. *Id.* at 749 (quoting *Ginsberg*, 390 U.S. at 639, 640).

249. *In re Enforcement of Prohibitions*, 8 F.C.C.R. at 707.

“[t]he ‘Great Debacle’ of 1889-90.”²⁵⁰ Overgrazing, reduced vegetation renewal, drought, and storms took a terrible toll on cattle, ranchers, and the land. Add to that “the homesteader harassment, range wars, illegal claims and conspiracies, and other grubby commonplaces of those lawless days.”²⁵¹ Unfortunately, “the ultimate losers in the tumult were the land’s native ecosystems.”²⁵² “All the while, Congress stood aloof from the fray.”²⁵³ Now, “the federal failure to prevent [the] despoliation”²⁵⁴ of the Western “commons” suggests that the geeks’ catchy comparison of the nascent Internet to the Wild West is, unfortunately, true. The result was and is “the obvious damage to the resource and the deterioration of public morality.”²⁵⁵

250. George Cameron Coggins & Margaret Lindeberg-Johnson, *The Law of Public Rangeland Management II: The Commons and the Taylor Act*, 13 ENVTL. L. 1, 22 (1982).

251. *Id.* at 23.

252. *Id.*

253. *Id.*

254. *Id.*

255. *Id.*