Congress, the Internet, and the Intractable Pornography Problem: The Child Online Protection Act of 1998

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I. INTRODUCTION

In 1998, sixteen million children under age eighteen were reported to be using the Internet, nearly doubling the number of children reported to be online in 1997. Over six million of these children were age twelve and under, up from the 3.5 million reported to be online the previous year. One of the perils for children of surfing the Internet, particularly the World Wide Web, is the proliferation of "adult" sites on the Web that promote and sell pornographic materials. There are currently estimated to be over 30,000 such sites, which generate nearly $1 billion in annual revenues. In 1998, it was estimated that nearly 70% of the traffic on the Web consisted of adult-oriented material that was unsuitable for children.

In real space, the government can create physical and geographical "zones" within communities such that children are denied access to adult materials and shielded from adult activities. These zones are effective in real space, where concrete geographical boundaries exist and where it is possible to verify the age of persons who seek to enter adult zones. Thus, children can be prohibited from entering adult establishments or from purchasing certain adult goods, such as pornog-

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1. The 1997 American Internet User Survey: Realities Beyond the Hype (Apr. 9, 1999) <http://etrg.findsvp.com/internet/findf.html>. These figures include children online from any location including home, school, libraries, homes of friends, and relatives. See id. Children use the Internet for a wide variety of activities, including homework, informal learning, browsing the World Wide Web, playing games, corresponding with friends by e-mail, placing messages on electronic bulletin boards, and participating in chat rooms.


4. See id. (citing The Net's Dirty Little Secret: Sex Sells (Upside Publishing Co., Apr. 1998)).
ography, that are deemed harmful to them. The Supreme Court has recognized, as part of its First Amendment jurisprudence, that governments can regulate the location — either through concentration or dispersion — of establishments such as adult movie theaters in order to alleviate "secondary effects" on the community, like crime and deteriorating property values, and to improve generally the quality of urban life.

By comparison, "cyberspace," where many of us now also "live," presently contains neither geographical boundaries nor methods by which users can be instantly and reliably identified. The absence of geography and identity in cyberspace confounds those who wish to protect children, as in real space, by creating "red light" cyber-districts, adults-only Web pages, or, indeed, any type of zone based upon the content of speech posted on the Internet. Information providers who post material on the Internet cannot yet reliably determine the age of users who access those materials. Thus, the only certain method for denying children access to "adult" materials on the Internet is to deny adults such access as well — a significant burden on the exercise of adults' free speech rights.

Several current projects, including gateway technology, ratings systems, and domain naming systems, may eventually lead to the replication of the boundary and identity dimensions of real space and create cyber-communities that look something like real space communities. Should these projects prove workable, it may be possible to create viable adult zones in cyberspace. Without them, or at least something like them, it will be virtually impossible to transfer real space zoning principles to cyberspace. In cyberspace, at least in


7. According to David R. Johnson and David Post: "Cyberspace has no territorially based boundaries, because the cost and speed of message transmission on the Net is almost entirely independent of physical location." David R. Johnson & David Post, Law and Borders — The Rise of Law in Cyberspace, 48 STAN. L. REV. 1367, 1370 (1996). Johnson and Post also note: "The Net enables transactions between people who do not know, and in many cases cannot know, each other's physical location." Id. at 1371.

8. For a proposal for zoning based upon domain name technology, see April Mara Major, Internet Red Light Districts: A Domain Name Proposal For Regulatory Zoning Of Obscene Content, 16 J. MARSHALL J. COMPUTER & INFO. L. 21 (1997). The current trend toward the "zoning" of cyberspace is discussed by Lawrence Lessig, The Zones of Cyberspace, 48 STAN. L. REV. 1403 (1996).
The notion that software codes can limit and, in some cases, trump, legal codes in cyberspace was formally enshrined as a principle of constitutional law in *Reno v. ACLU.* In *Reno,* the Supreme Court struck down portions of the Communications Decency Act (the "CDA") under which Congress sought to impose criminal liability on anyone communicating on the Internet who knowingly distributed "indecent" or "patently offensive" materials to those under eighteen years of age. Applying strict scrutiny to the CDA, the Supreme Court held that while the goal of zoning "indecent" and "patently offensive" materials was undoubtedly a compelling one, Congress went too far and too fast in its effort to incorporate real space zoning principles into the realm of cyberspace. The Court recognized that current technological limitations make it impossible to bar minors' access to harmful adult-oriented materials on the Internet without also barring adults from engaging in constitutionally protected speech. This is so, the Court reasoned, because current technology cannot duplicate in cyberspace the critical aspects of geography and identification that are present in real space. The government, pointing to the almost daily innovations in user-based blocking software and gateway technology, urged the Court to recognize that technological innovation was fast making Internet zoning a realistic solution to the problem of children's access to cybersmut. Highlighting the unique nature of the Internet as a medium of free expression and the unprecedented nature of the government's proposed restrictions on free speech in cyberspace, the Court, however, refused to uphold Congress' massive zoning effort, which covered the entire Internet and was backed by the threat of criminal sanctions, on the mere promise of future technological advances.

9. There are many areas — searches under the Fourth Amendment come readily to mind — where the government has reaped the benefits of technological advances. See, e.g., United States v. Robinson, 62 F.3d 1325, 1328 (11th Cir. 1995) (holding that thermal infrared surveillance is not an unconstitutional search).
13. Id. at 874, 876.
14. Justice Sandra Day O'Connor, who filed an opinion concurring in part and dissenting in part, offered the most explicit discussion on this point. She focused on the "twin characteristics of geography and identity" that have enabled effective adult zoning in real space. Id. at 886, 889 (O'Connor J., concurring in part, dissenting in part).
16. Id. at 849-53, 858-61, 874.
While technological advances, spurred by market forces, continue apace, none have undermined Justice Sandra Day O'Connor's observation in *Reno* that the Internet remains "largely unzoned — and unzoneable."

Nonetheless, despite the clarity of the *Reno* Court's message and the absence of technological advances sufficient to bring about effective speech zoning on the Internet, in October 1998 Congress passed and President Clinton signed the Child Online Protection Act ("COPA"). COPA requires, by way of criminal conviction and heavy civil fines, that those "engaged in the business" of selling materials on the World Wide Web that are "harmful to minors" restrict access to such materials by anyone under the age of seventeen. COPA is Congress' latest answer to the "intractable obscenity problem" posed by the unique characteristics of the Internet.

Like the CDA, COPA was immediately dismissed by many as little more than election-year pandering to conservative voters. Detractors have variously dubbed COPA "CDAII," "Son of CDA," or "The Congress Doesn't Understand the Internet Act." COPA, however, is a far more modest zoning project than the CDA. Unlike the CDA, which

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17. *Id.* at 891 (O'Connor, J., concurring in part, dissenting in part).
19. *Id.* (to be codified at 47 U.S.C. § 231(a)(1)).
20. Interstate Circuit, Inc. v. City of Dallas, 390 U.S. 676, 704 (1968) (Harlan, J., concurring in part, dissenting in part). Prior to *Miller v. California*, 413 U.S. 15 (1973), in which the Supreme Court set forth the current governing test for "obscenity" under the First Amendment, the Court struggled to find a workable solution to the "intractable obscenity problem." See *Roth v. United States*, 354 U.S. 476, 484-85 (1957). In the CDA and COPA, Congress has struggled with speech of a different stripe — that which is not obscene under *Miller*, but is deemed "harmful to minors" and therefore subject to regulation.
21. COPA was immediately challenged in court. The day after President Clinton signed COPA into law, a consortium led by the American Civil Liberties Union filed a lawsuit in a Pennsylvania federal court challenging COPA, both on its face and as applied, as a violation of the First Amendment. See Complaint, ACLU v. Reno, No. 98-5591 (E.D. Pa. Oct. 22, 1998) (on file with author). The plaintiffs are: The ACLU, Androgyne Books, Inc., d/b/a A Different Light Bookstores, American Booksellers Foundation For Free Expression, Artnet Worldwide Corporation, Blackstripe, Addazi, Inc., d/b/a a Condomania, Electronic Frontier Foundation, Electronic Frontier Information Center, Free Speech Media, Internet Content Coalition, OBGYN.Net, Philadelphia Gay News, Planetout Corporation, Powell's Bookstores, RIOTGRRL, Salon Internet, Inc., and West Stock, Inc. On November 19, 1998, the district court granted plaintiffs' application for a temporary restraining order. See Memorandum and Order of Reed, J., ACLU v. Reno, No. 98-5591 (E.D. Pa. 1998) (on file with author). On February 1, 1999, the district court held that plaintiffs had satisfied the requirements for a preliminary injunction, including demonstration of a likelihood of success on the merits, and enjoined enforcement of COPA pending trial. See Memorandum and Order of Reed, J. *Reno* (No. 98-5591) (on file with author). Unlike the CDA, which contained a provision allowing expedited appeal from the district court to the Supreme Court, see 47 U.S.C. § 561(a)(1) (Supp. 1998), COPA's fate must be determined through the usual appellate process, including the Supreme Court's discretionary review. On April 2, 1999, the Department of Justice filed a notice of appeal from the district court's preliminary injunction.
sought to prohibit "indecent" and "patently offensive" speech from reaching minors anywhere in cyberspace, COPA was specifically designed by Congress to regulate and penalize only those who participate in the commercial market for materials deemed obscene with respect to minors in only one of the Internet's many fora — the World Wide Web. Congress apparently interpreted Reno as an invitation to return to the drafting table, and created COPA with what it believed to be a literal blueprint provided by the Court.22 Because COPA was fashioned specifically to address the Court's concerns, it cannot be as readily dismissed as the CDA.

In Part II of this article, I will examine the current state of Internet technology as it relates to the aspects of geography and identity, the two critical components of effective zoning laws.23 In doing so, I will draw on many of the 123 separate findings of fact made by the three-judge district court panel in Reno v. ACLU.24 Because Congress enacted COPA specifically to respond to the Reno decision, in Part III, I will review the ill-fated CDA and the Supreme Court's analysis of Congress' first attempted Internet zoning project.25 After examining COPA in Part IV, I conclude that despite Congress' narrower brush, the most recent blueprint it has fashioned for an adult zone on the Web will not withstand constitutional scrutiny.26 Indeed, Congress fundamentally misconstrued Reno as an invitation to try again to regulate Internet speech. Rather, given the infancy of the Internet, rapid advances in technology enabling users (i.e., parents) themselves to zone speech, and the fundamental uncertainty concerning the shape Internet communities will ultimately assume, the Court's clear intention was to caution Congress that any content-based restrictions on Internet speech would likely be struck down.

Nevertheless, if history and politics offer any window to the future, Congress will remain undeterred and COPA will not be its last Internet zoning project. Thus, in Part V, I will propose an approach to future legislation that satisfies Congress' need to protect children from harmful materials on the Internet, while preserving the democratic nature of the medium and respecting the limitations on zoning imposed by technology and established First Amendment jurisprudence.27 I will argue, however, that the best solution to the Internet's

22. See H.R. Rep. No. 105-775, at 5 (1998) (stating that COPA "has been carefully drafted to respond to the Supreme Court's decision in Reno v. ACLU, 117 S. Ct. 2329 (1997)").
23. See infra notes 28-106 and accompanying text.
25. See infra notes 107-96 and accompanying text.
26. See infra notes 197-299 and accompanying text.
27. See infra notes 300-09 and accompanying text.
“intractable pornography problem” is not to impose criminally sanctionable government censorship, but rather for Congress to encourage the development of technology that allows the adult user (i.e., parent) to determine what types of cyberspeech should or should not be received in the home.

II. GEOGRAPHY, IDENTITY, AND THE INTERNET

As Justice O'Connor noted in her concurring and dissenting opinion in Reno, in real space there is no need to question whether “an adult zone, once created, would succeed in preserving adults' access while denying minors' access to the regulated speech.”28 The efficacy of adult zones in real space can be assumed, because geography and identity enable proprietors of adult establishments to permit adults to enter while preventing children, who generally cannot conceal their age, from coming inside.29 In addition, legislators can lessen the chances that children will encounter such establishments by zoning them away from schools and by concentrating them in areas that children are unlikely to frequent.30

By contrast, “Netizens” travel the Web rapidly, seamlessly, and anonymously, often visiting multiple sites whose primary geographical attributes are addresses somewhere in cyberspace and a common computer code that allows users to access data from their individual computers. Without perfect computer codes designed to enable precise discrimination in the access to and distribution of speech, regulation of speech in cyberspace is imprecise, and therefore, constitutionally suspect. Simply put, it is, at least at present, more difficult to regulate bytes than atoms. There are no cyber-bouncers or cyber-proprietors standing at the entrance of adult establishments on the Internet to restrict access to zones by age. Indeed, although there are borders in cyberspace, there are as yet no boundaries or walls.32

30. As Professor Lessig has pointed out, most of real space is effectively zoned, whether through legislation or social norms and values. He stated: “In general, you don't see homeless people wandering through Barneys; you don't see children in bars; you don't see bars in residential neighborhoods; you don't see houses next to factories.” Lessig, 45 EMORY L.J. at 887 (emphasis omitted).
31. Because COPA seeks only to regulate speech on the World Wide Web, I focus in this section primarily on that Internet forum. For a full discussion of other Internet fora, including e-mail and newsgroups, the reader is referred to the detailed findings of fact made by the district court panel in Reno. See Reno, 929 F. Supp. at 830-49.
32. See Lessig, The Zone of Cyberspace, 48 STAN. L. REV. at 1408 (“Borders are not boundaries; they divide one system from another just as Pennsylvania is divided from Ohio.”).
Once material is placed in cyberspace, it is available to all who have access to a computer and modem. These distinctive Internet characteristics pose unique difficulties for erecting content-based zones in cyberspace that comport with constitutional principles developed in real space.

A. THE GEOGRAPHY OF THE INTERNET

The Internet is not a physical or tangible entity, but rather a giant network that interconnects innumerable smaller groups of linked computer networks. It is infinite space that plays host to a decentralized, global medium of communications linking people, institutions, corporations, and governments around the world. While estimates are difficult to confirm, the Internet is currently believed to connect more than 159 countries and over 100 million users. This international system of communication allows tens of millions of people with access to it to exchange information — usually instantaneously.

As Professor Lawrence Lessig, a leading commentator on cyber-space law, has noted, what is central about the Internet's present architecture is "the anarchy it preserves." No single entity or group of entities controls the material made available on the Internet or limits, or is able to limit, the ability of others to access such materials. Rather, the range of digital information available to Internet users is individually created, maintained, controlled, and located on millions of separate individual computers around the world. Once an information provider posts its content on the Internet, it has no way to prevent that content from entering any community. This enables one who posts information on the Internet to reach a potentially worldwide audience.

34. Reno, 929 F. Supp. at 831.
35. Id. The district court found that "[i]n all, reasonable estimates are that as many as 40 million people around the world can and do access the enormously flexible communication Internet medium. That figure is expected to grow to 200 million Internet users by the year 1999." Id. There is some controversy surrounding the estimates of the size of the Internet. See, e.g., D.L. Hoffman, W.D. Kalsbeek & T.P. Novak, "Internet and Web Use in the United States: Baselines for Commercial Development," Communications of the ACM, 36-46 (Dec. 1996).
37. Lessig, 48 STAN. L. REV. at 1408. Professor Lessig has explained that cyberspace is not in a state of pure anarchy. Rather, given the crudeness of the "technologies of control," cyberspace is "a place of relative freedom" in which "control is exercised through the ordinary tools of human regulation — through social norms, and social stigma; through peer pressure, and reward." Id. at 1407.
38. See Reno, 521 U.S. at 853.
The Internet was designed to be a decentralized, yet linked, network of computers capable of rapidly transmitting communications without direct human involvement or control. It is comprised of multiple links between computers and computer networks. Communications sent over this redundant series of linked computers may travel any number of routes to their ultimate destination. The Internet was designed such that these communications could be re-routed if one or more individual links were damaged or otherwise unavailable.

Those who operate within this primitive architecture or geography utilize a wide variety of methods of communication and information exchange. Among them are one-to-one messaging ("e-mail"), one-to-many messaging, distributed message databases, real-time communication, and remote information retrieval (such as the World Wide Web). Most of these methods of communication can be used to transmit text, images, data, and sound. The variety of content posted on the Internet "is as diverse as human thought." A significant percentage of that content — perhaps 40% or more — originates outside the United States.

The World Wide Web is currently the most popular way to provide and retrieve information on the Internet. The Web was created to serve as the basis for a global, online repository of knowledge, containing information from a variety of sources and accessible to Internet users around the world. Because all of the computers on which Web
information is stored are connected to the Internet by the same digital protocol, all of the information is part of a single body of knowledge.50

Physically, then, the Web "is a series of documents stored in different computers" around the world.51 Anyone with access to the Internet and appropriate software can post content on the Web. The Web comprises millions of separate but interconnected "Web sites," which in turn may have hundreds of separate "Web pages" that display content provided by particular persons or organizations.52 Any Internet user anywhere in the world with the proper software can create her own Web page, view Web pages posted by others, and then read text, look at images and video, and listen to sounds posted at these sites.

User-oriented navigation on the Web consists of visiting a series of Web sites in order to browse or search for a variety of content. To gain access to the information available on the Web, a person uses a Web "browser"—software such as Netscape Navigator, Mosaic, or Internet Explorer—to display, print and download documents that use hypertext transfer protocol ("http"), the standard Web formatting language. Each document on the Web has an address (much like a telephone number) that allows users to find and retrieve it.53 Most Web documents also contain "links"—short sections of text or image that refer and link to another document.54 When selected by the user, the linked document is automatically displayed, wherever in the world it is actually stored.55 The Web was designed such that a link is followed with a maximum target time of one tenth of a second.56

Through the use of these links from one computer to another and from one document to another, the Web for the first time unifies the diverse and voluminous information made available by millions of users on the Internet into a single body of knowledge that can easily be searched and accessed.57

While there are no business "districts" on the Web, many organizations and businesses have "home pages" on the Web.58 These pages contain a set of links designed to provide information concerning the

50. The protocol is referred to as "W3C." Id.
52. Id.
53. Id. The address is known as a Universal Resource Locator or "URL."
55. Id.
56. Id. at 837.
57. Id. at 836, 837.
58. Over 10.3 million, or 28%, of the 36.7 million Internet hosts are commercial domains (.com). See Lottor, supra note 47, at <www.nw.com/zone/WWW/districtnum.html>. As the Internet is changing at such a rapid rate, and because it is not subject to any centralized authority, it is not possible to know with any assurance the number of sites that are operated by for-profit ventures.
organization, and through the links guide the user directly or indirectly to information about or relevant to that organization. Web publishers may allow their Web sites to remain open to the general pool of all Internet users, or they may close them to all except those who have advance authorization to enter the site. Many publishers choose to maintain open sites in order to give their information the widest possible audience. Should a publisher wish to restrict access to a site, she must assign specific user names and passwords as a prerequisite to access.

As they have with other new media, entrepreneurs are beginning to explore the business opportunities available on the Web. While it is not possible to know the precise number of sites that are run by profit-making ventures, it is estimated that there may be more than one million such enterprises currently operating on the Web. Like real space businesses, these cyber-businesses seek to generate revenue in several ways. Many Web publishers generate revenue through advertising on their sites, much as a magazine publisher will do in real space. In addition, content providers such as online booksellers, music stores, and providers of art services allow potential customers to browse their sites for free—similar to browsing in real space bookstores and art galleries—in the hope that users will purchase goods on their visit. Finally, some online content providers seek to make a profit by charging their content contributors, although users still may access their content for free.

60. Information is said to be “published” on the Web when it is made available. Id. at 837. Publishing “simply requires that the ‘publisher’ has a computer connected to the Internet and that the computer is running the W3C server software.” Id.
62. Id.
63. Id.
64. See, e.g., Netcraft Web Server Survey <http://www.netcraft.com/Survey/> (providing data on the growth in Internet web sites).
65. Professor Donna L. Hoffman, who submitted a declaration in support of plaintiffs’ motion for a temporary restraining order in the lawsuit challenging COPA and who testified at the hearing on plaintiffs’ motion for a preliminary injunction, stated that there are five general business models operating on the Web: (1) the Internet presence model, which involves no direct sales or advertising but is used by a business to raise customer awareness of the name and products of the Web site operator; (2) the advertiser supported or sponsored model, in which nothing is for sale, content is provided for free, and advertising on the site is the source of all revenue; (3) the fee based or subscription model in which users are charged a fee before accessing content; (4) the efficiency or effective gains model, by which a company uses the Web to decrease operating costs; and (5) the online storefront, in which a consumer buys a product or service directly over the Web. Professor Hoffman testified that the most popular business model on the Web is the advertiser supported or sponsored model, and that the fee based model was the least popular on the Web. See Memorandum Opinion Granting Preliminary Injunction, ACLU v. Reno, No. 98-5891 (E.D. Pa. Feb. 1, 1999).
The content on the Web is not limited to published documents. The Web also allows individuals to communicate in discussion groups and chat rooms and by e-mail using hypertext transfer protocol. Many Web sites use software applications, sometimes called "middleware," to provide users of their sites with access to discussion groups and chat rooms. Discussion groups allow users of computer networks to post messages onto a public computerized bulletin board and to read and respond to messages posted by others in the discussion group.\(^6^6\) Discussion groups have been organized to cover virtually every topic imaginable.\(^6^7\) Chat rooms allow a user to engage in simultaneous conversations with another user or group of users by typing messages and reading the messages typed by others participating in the "chat."\(^6^8\) Online discussion groups and chat rooms create a new global public forum where individuals can associate and communicate with others who have common interests, obtain instant answers to research questions, and engage in discussion or debate on an almost limitless variety of topics.\(^6^9\) It is also possible to set up an account for electronic mail on the Web. Several commercial Web sites, such as Yahoo and Hotmail, will provide free e-mail accounts to individuals. These accounts allow individuals to use the Web to create, send, and receive e-mails with other individuals. Such accounts allow individuals who do not possess their own computer or Internet access account to establish a permanent e-mail address and to correspond with other individuals by using the Web at public libraries and other public Internet access sites.

B. IDENTITY AND THE INTERNET

Web browsers, utilizing what Professor Lessig has described as the "technologies of privacy,"\(^7^0\) determine what others will know about them. As Professor Lessig has written:

One enters cyberspace as one wants. One can enter identifying who one is, or one can hide who one is. One can enter speaking a language that anyone can understand, or one can encrypt the language one speaks, so only the intended listeners can understand what one says. What others see of you is within your control; what others understand of you is within your control as well.\(^7^1\)

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67. Id.
68. Id. at 851-52.
69. Id.
70. Lessig, 45 Emory L.J. at 876.
71. Id.
This is a power different in both degree and character from our ability as citizens in real space to, on occasion, mask our identities. In cyber-space, we have the ability to hide absolutely who we are. Thus, "[c]yberspace is a place that maximizes both social and individual plasticity, which means it is a place that determines very little about what others must know about you."\(^{52}\)

Software technology has not yet managed to alter the fundamental "plasticity" of the Internet. There is currently no effective way to determine the identity or age of a user who is accessing material through e-mail, newsgroups, chat rooms, and the like.\(^{73}\) An e-mail address, for example, provides no authoritative information concerning the addressee — indeed, some even use e-mail "aliases" to conceal their identities.\(^{74}\) Thus, information providers operating in these various fora have no way of knowing the age of those who are consuming their materials.\(^{75}\)

Technology does exist, however, that allows the operator of a Web site to interrogate users concerning their identity and age prior to granting access to a site.\(^{76}\) An "html" document can include a fill-in-the blank "form" to request information from a visitor to a Web site.\(^{77}\) The information collected can then be "transmitted back to the Web server and be processed by a computer program, usually a Common Gateway Interface (cgi) script."\(^{78}\) The cgi script enables a Web server to process the form and thereby "screen visitors by requesting a credit card number or adult password."\(^{79}\) Based upon the information provided, "[t]he Web server could then grant or deny access to the information sought."\(^{80}\)

The principal difficulty with an age verification system based upon cgi script is that it is unavailable to content providers who publish information on the Web through "one of the large commercial online services, such as America Online," because the server software available to subscribers of these services cannot at present process cgi scripts.\(^{81}\) These commercial online services together have nearly twenty million subscribers. Thus, for a great many Web publishers, cgi script verification is not a viable option for limiting access to their Web sites.

\(^{52}\) Id. at 877.
\(^{73}\) Reno, 929 F. Supp. at 845.
\(^{74}\) Id.
\(^{75}\) Reno, 521 U.S. at 855.
\(^{76}\) Reno, 929 F. Supp. at 845.
\(^{77}\) Id.
\(^{78}\) Id.
\(^{79}\) Id.
\(^{80}\) Id.
\(^{81}\) Id. at 845-46.
For those publishers who do not post their material on the Web through one of the major commercial services, there are several other difficulties associated with requiring that users provide a credit card number to gain access to a site. First, there is currently no reliable method to verify that the card number used is valid prior to allowing a user to enter a site. Second, even if such technology were available, age verification by means of credit card would remain economically and practically unavailable to most non-commercial content providers. Verification agencies will not process a credit card unless it accompanies a commercial transaction. Third, using credit card verification as a surrogate for age would impose significant economic costs on non-commercial and commercial entities alike. Many commercial establishments operating in cyberspace do not charge — and do not wish to charge — for access to their speech. Fourth, credit card verification would substantially alter the presently seamless retrieval of information on the Internet. Information would no longer be instantaneously accessible to users, who would have to provide a credit card number each time they wanted to access a particular site containing blocked material. Finally, imposition of a credit card requirement would bar all adults who do not have a credit card — including many users who are accessing the Internet from locations outside the United States — from accessing any blocked material.

Content providers might also restrict access to their sites by requiring an adult password, access code, or digital certificate to be provided prior to permitting entry. A few commercial enterprises will, for a fee, verify a user's age and distribute adult passwords or access codes. These costs are either incurred by users when they apply for passwords, or are passed along to users by the Web server. Establishing and maintaining an age verification system would impose substantial economic and administrative costs on content providers, who must purchase and implement the software necessary to screen the passwords, codes, and age certificates, as well as users who must obtain a
password from one of the commercial services. In addition, many content providers strive to make their materials available to a wide audience free of charge, a goal that would be significantly undermined if age verification is required for access. Finally, because an age verification system would require users to present a credit card or other form of personal identification over the Internet prior to even entering a site, many users likely would be discouraged from visiting certain sites to retrieve information, particularly if those sites are thought to contain controversial or "indecent" material.

There are a number of additional technologically feasible methods of zoning material on the Internet based upon its content. One such method, "tagging," would require content providers to label all of their prohibited material by imbedding a string of characters, such as "XXX" for obscene materials, in either the URL or HTML. For tagging to be effective, content providers would be required to review all of their online content to determine whether the banned speech appears in any file, and then embed a tag in that file. Once this burdensome task was accomplished, a user could install software on his or her computer to screen for any tagged material. This process would, of course, require content providers to make a judgment as to whether their files contain any of the proscribed speech. Alternatively, "a content provider could tag its entire site." Blocking or screening software — programs designed to be installed on a user's home computer — could then be utilized to prevent a user from accessing any of the information on the site. To be effective, tagging requires that: (1) content providers agree on what speech is prohibited,

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89. Id. at 847. The district court noted that "[t]here was testimony that the costs would be prohibitive even for a commercial entity such as HotWired, the online version of Wired magazine." Id.
91. Id. Commercial information providers, many of whom seek to make a profit from advertising revenues, obviously depend upon the largest possible audience being permitted to enter their sites. As the district court noted, "[t]here is concern by commercial content providers that age verification requirements would decrease advertising and revenue because advertisers depend on a demonstration that the sites are widely available and frequently visited." Id.
92. A Universal Resource Locator ("URL") is the address for a particular Web site.
93. See Reno, 929 F. Supp. at 847. HTML is the common information storage format by which the Web links together disparate information.
94. See Reno, 929 F. Supp. at 847.
95. Id. The district court noted that the Carnegie Library, for example, "would be required to hire numerous additional employees" to screen its entire online content for arguably prohibited speech. Id. The court found that "[t]he cost and effort would be substantial for the Library and frequently prohibitive for others." Id.
97. Id. at 848.
and (2) blocking software currently exist that can recognize an agreed-upon tag.\textsuperscript{98} Neither of these requirements can currently be met.\textsuperscript{99}

Another potential publisher-based solution to the identity problem is Domain Name System ("DNS") zoning. Currently, any size network can join the Internet by applying for membership in two domain hierarchies: organizational and geographical.\textsuperscript{100} The organizational hierarchy is divided into seven so-called "top-level" domains.\textsuperscript{101} For example, commercial sites are required to register with Network Solutions, Inc. in the ".com" top-level domain. DNS enables each domain to be administered by a different organization.\textsuperscript{102} There are currently several proposals to create a generic top-level domain on the Internet that would be specifically reserved for adult content.\textsuperscript{103} For example, sites that contain adult material might be placed in a new domain such as ".adult" or ".xxx." It would then be incumbent upon software manufacturers to develop blocking software to deny access to all sites in the new domain. Of course, as with tagging, this potential solution would require that judgments be made concerning whether the content of a site requires that it be located within the new domain and would further require that software be developed to block sites based upon the new domain names.

There are also a number of promising blocking or filtering techniques currently available that allow the user to decide what type of content he or she will allow to be accessed from a computer. These techniques vary: they can be as simple as stand-alone software that blocks access to particular sites or as complicated as software programs that review each page of material posted on the Web based on a set of key words.\textsuperscript{104} As already mentioned, some blocking technology

\textsuperscript{98} Id.
\textsuperscript{99} Id.
\textsuperscript{100} Id. at 24.
\textsuperscript{101} The seven top-level domains are: (1) ".com," (2) ".edu," (3) ".gov," (4) ".mil," (5) ".int," (6) ".net," and (7) ".org." Id.
\textsuperscript{102} See Id. at 25-29. On November 25, 1998, the Department of Commerce and the Internet Corporation for Assigned Names and Numbers ("ICANN") signed a memorandum of understanding in which they agreed to transfer responsibility for the Internet domain names system from the United States government to a recently created private non-profit corporation. (The MOA is located at www.ntia.doc.gov.) The agreement calls for Commerce and ICANN to, among other things, oversee policy established for determining whether new generic top-level domains should be added.
\textsuperscript{103} See Id. at 25-29.
\textsuperscript{104} In Reno, the court noted that "[t]he World Wide Web Consortium has launched the PICS ('Platform for Internet Content Selection') program in order to develop technical standards that would support parents' ability to filter and screen material that their children see on the Web." Reno, 929 F. Supp. at 838. The Consortium expects that PICS will allow third parties, as well as individual publishers, to rate content on the Internet. See id.
can be used in conjunction with the "tagging" and DNS methods. The chief difficulty with the current blocking software is that it may screen too broadly for "indecent" materials — screening for "breast," for example, may result in the blocking of useful information on breast cancer. Parental control software also cannot currently screen for sexually explicit images unaccompanied by suggestive text. Nevertheless, despite these limitations, "currently available user-based software suggests that a reasonably effective method by which parents can prevent their children from accessing sexually explicit and other material which parents may believe is inappropriate for their children will soon be widely available."106

III. ROUND I: THE COMMUNICATIONS DECENCY ACT ("CDA")

In years past, the Supreme Court has examined government restrictions on speech in a variety of media contexts, including radio,107 newspapers,108 telephones,109 and cable television.110 In Reno v. ACLU,111 the Court addressed for the first time the constitutionality of governmental regulation of speech in the context of what it called "the vast democratic fora of the Internet."112 Its examination was precipitated by a challenge to two provisions of the CDA whereby Congress sought to protect minors from "indecent" and "patently offensive" material on the Internet, and was informed by extensive findings of fact made by a three-judge district court panel, many of which were discussed in Part II, concerning the Internet and the current state of cyberspace technology.113 As Congress apparently read Reno quite literally as a blueprint for erecting a constitutional adult cyberezone, and because determination of the constitutionality of COPA will turn in large part on application of the Reno decision, I

106. Id.
113. Reno, 521 U.S. at 849-61. The findings were in large part the result of a detailed stipulation prepared by the parties. Id. at 849.
examine closely in this Part the CDA and the Supreme Court's analysis of that statute.

A. THE CDA'S STATUTORY FRAMEWORK

The CDA had a less-than-impressive legislative pedigree. Inserted as Title V of The Telecommunications Act of 1996, its provisions were, as the Supreme Court noted, "either added in executive committee after the hearings were concluded or as amendments offered during floor debate on the legislation." No hearings were held on the two provisions that became law and were subsequently challenged in Reno.

The first provision of the CDA challenged in Reno prohibited the knowing transmission by means of any "telecommunications device" over the Internet of "obscene or indecent" messages to any recipient under eighteen years of age. The statute did not define "indecent" in any respect. Violation of this provision carried penalties of imprisonment of no more than two years or a fine, or both.

The second CDA provision prohibited knowingly sending or displaying over the Internet, by means of an interactive computer service, "patently offensive" messages in a manner that is available to a

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115. Reno, 521 U.S. at 858.
116. Id. at 859 n.24.
117. Id. at 859; Child Online Protection Act, Pub. L. No. 105-277, 112 Stat. 2681 (1998) (to be codified at 47 U.S.C. § 223(a)(1)-(2)) [hereinafter COPA]. Section 223(a) provides, in pertinent part:
   (a) Whoever —
      in interstate or foreign communications —
      
      * * *
   (B) by means of a telecommunications device knowingly —
      (i) makes, creates, or solicits, and
      (ii) initiates the transmission of,
      any comment, request, suggestion, proposal, image, or other communication which is obscene or indecent, knowing that the recipient of the communication is under 18 years of age, regardless of whether the maker of such communication placed the call or initiated the communication;
      * * *
      (2) knowingly permits any telecommunications facility under his control to be used for any activity prohibited by paragraph (1) with the intent that it be used for such activity,
      shall be fined under title 18 or imprisoned not more than two years, or both.
   Id.
118. Reno, 512 U.S. at 859. Appellees did "not challenge the application of the statute to obscene speech," which, the Court noted, is subject to absolute ban. Id. at 833. Thus, the Court severed the "or indecent" portion of the statute from the prohibition on "obscene" communications.
person under eighteen years of age. The statute did not define which "community standards" — whether of the local community, some broader "community" of Internet users, or some other national standard — would be applied in determining whether speech was considered "patently offensive." Violation of this provision also carried criminal penalties.

The CDA provisions applied broadly to the entire universe of cyberspace, including e-mail, mail exploders, newsgroups, chat rooms, and the World Wide Web. They were qualified, however, by two affirmative defenses. The first defense was broadly worded; it allowed those who took "good faith, reasonable, effective, and appropriate actions" that were "feasible under available technology" to restrict access by minors to the prohibited communications to escape conviction. The second defense specifically covered those who restricted access to "indecent" or "patently offensive" material by requiring certain designated forms of age proof, such as a verified credit card number.

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119. Reno, 521 U.S. at 859; COPA (to be codified at 47 U.S.C. § 223(d)). Section 223(d) provides:

(d) Whoever —
(1) in interstate or foreign communications knowingly —
(A) uses an interactive computer service to send to a specific person or persons under 18 years of age, or
(B) uses any interactive computer service to display in a manner available to a person under 18 years of age,
any comment, request, suggestion, proposal, image, or other communication that, in context, depicts or describes, in terms patently offensive as measured by contemporary community standards, sexual or excretory activities or organs, regardless of whether the user or such service placed the call or initiated the communication; or
(2) knowingly permits any telecommunications facility under such person's control to be used for an activity prohibited by paragraph (1) with the intent that it be used for such activity,
shall be fined under title 18 or imprisoned not more than two years, or both.

Id.

120. Reno, 521 U.S. at 873-74. The phrase "patently offensive" was "qualified only to the extent that it involve[d] 'sexual or excretory activities or organs' taken 'in context' and 'measured by contemporary community standards.'" See id. at 874 n.35; COPA (to be codified at 47 U.S.C. § 223(d)(1)(B)).

121. The defenses, set forth in section 223(e)(5) of COPA provide in full:

(5) It is a defense to a prosecution under subsection (a)(1)(B) or (d) of this section, or under subsection (a)(2) of this section with respect to the use of a facility for an activity under subsection (a)(1)(B) of this section that a person—
(A) has taken, in good faith, reasonable, effective, and appropriate actions under the circumstances to restrict or prevent access by minors to a communication specified in such subsections, which may involve any appropriate measures to restrict minors from such communications, including any method which is feasible under available technology; or
(B) has restricted access to such communication by requiring use of a verified credit card, debit account, adult access code, or adult personal identification number.

COPA (to be codified at 47 U.S.C. § 223(e)(5)).

122. See COPA (to be codified at 47 U.S.C. § 223(e)(5)(A)).
or an adult identification number or code. 123 Persons utilizing one or more of these forms of identification also would escape conviction under the CDA. 124

B. STRICT SCRUTINY FOR INTERNET SPEECH RESTRICTIONS

Fifty years ago, Justice Robert H. Jackson recognized that "[t]he moving picture screen, the radio, the newspaper, the handbill, the sound truck and the street corner orator have differing natures, values, abuses and dangers. Each . . . is a law unto itself." 125 The Supreme Court has long employed differential treatment of the mass media under the First Amendment, adjusting the level of scrutiny to suit the special features of the medium under consideration. 126

Applying this medium-specific approach, the Reno Court had little difficulty settling on strict scrutiny for the CDA, which requires that speech restrictions be justified by "compelling" governmental interests and "narrowly tailored" to effectuate those interests. 127 Reviewing its precedents involving other media, the Court concluded that the unique factors that had led it on occasion to qualify the level of First Amendment scrutiny — including a history of government regulation, 128 scarcity of available frequencies at inception, 129 and the invasive nature of the media 130 — are not present in cyberspace. 131 The Internet, the Court noted, has never been regulated, has no scarcity of outlets for speech, and is a user-driven medium of expression that requires users to take several affirmative steps before content appears on a computer screen. 132 The Court recognized that the Internet had

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123. See id. (to be codified at 47 U.S.C. § 223(e)(5)(B)).
126. See, e.g., Turner Broad. Sys., Inc. v. FCC, 512 U.S. 622, 637, 661-64 (1994) ("It is true that our cases have permitted more intrusive regulation of broadcast speakers than of speakers in other media."); Pacifica Found., 438 U.S. at 748 ("We have long recognized that each medium of expression presents special First Amendment problems.").
130. Id. (citing Red Lion Broad., 395 U.S. at 399-400).
131. Id. (citing Red Lion Broad., 395 U.S. at 399-400).
132. Id. at 868.
become a powerful new "marketplace of ideas" that was dramatically expanding in the absence of government regulation.\textsuperscript{133} The Court also was plainly disturbed by the breadth and unprecedented nature of the CDA's speech restrictions.\textsuperscript{134} The Court noted that the CDA's scope was not limited to "commercial speech or commercial entities."\textsuperscript{135} The Court rejected the Government's argument that the CDA was a constitutional form of "cyberzoning" on the Internet, similar to government efforts in real space to isolate and disperse adult establishments,\textsuperscript{136} noting that the CDA applied broadly to communications made in any of the "vast democratic forums of the Internet."\textsuperscript{137} In addition, the Court distinguished the CDA from efforts in real space to use zoning laws to disperse or concentrate adult establishments on the ground that, unlike real space zoning laws, which seek to ameliorate the secondary effects associated with the proscribed speech, the CDA was designed to protect children from the primary effects of "indecent" and "patently offensive" speech.\textsuperscript{138} The Court characterized the CDA as "a content-based blanket restriction on speech," and not a mere time, place, and manner regulation.\textsuperscript{139} Thus, the Court determined that its precedents applying lesser scrutiny to reasonable time, place, and manner restrictions\textsuperscript{140} did not provide any basis for applying less demanding scrutiny to the CDA's provisions.

C. Technology, Tailoring, and Overbreadth

Applying strict scrutiny, the \textit{Reno} Court held that the CDA's prohibitions on "patently offensive" and "indecent" Internet communications were not narrowly tailored and were unconstitutionally overbroad.\textsuperscript{141} The Court recognized, as it had many times in the past, that the government's interest in protecting children from harmful speech

\begin{thebibliography}{140}
\bibitem{133} \textit{Id.} at 868-69, 885.
\bibitem{134} \textit{Id.} at 887.
\bibitem{135} \textit{Id.}
\bibitem{136} \textit{Id.} at 867-68.
\bibitem{137} \textit{Id.} at 686-69.
\bibitem{138} \textit{Id.} at 867-68 (emphasis added); \textit{City of Renton v. Playtime Theatres, Inc.}, 475 U.S. 41, 49 (1986) (discussing secondary effects of adult movie theaters).
\bibitem{139} \textit{Reno}, 521 U.S. at 868.
\bibitem{140} \textit{Id.} See, e.g., \textit{Consolidated Edison Co. of N.Y., Inc. v. Public Serv. Comm'n of N.Y.}, 447 U.S. 530, 536 (1980) ("A restriction that regulates only the time, place, or manner of speech may be imposed so long as it is reasonable.").
\bibitem{141} \textit{Reno}, 521 U.S. at 868. Under the First Amendment overbreadth doctrine, a law must be struck down if it would "penalize a substantial amount of speech that is constitutionally protected . . . even if some applications would be constitutionally unobjectionable." \textit{Forsyth County Ga. v. Nationalist Movement}, 505 U.S. 123, 129 (1992). The doctrine of substantial overbreadth arose to permit facial challenges to laws that might have some permissible applications but that threaten a substantial quantity of constitutionally protected speech. See, e.g., \textit{Brockett v. Spokane Arcades, Inc.}, 472 U.S.
is a compelling one. However, the Court explained, the government's interest in protecting children "does not justify an unnecessarily broad suppression of speech addressed to adults." As the Court has explained in several cases involving speech restrictions in other media contexts, most recently with regard to proposed regulations of cable television content, "the Government may not 'reduce[e] the adult population . . . to . . . only what is fit for children.'"

The Court's conclusion that the CDA would result in an unnecessarily broad suppression of protected speech was based primarily upon the findings of the district court concerning the current state of cyber-space technology, as described in Part II of this article. The Court relied upon the district court's conclusion that current software technology does not provide an effective means by which to determine the age of a user who is accessing material through e-mail, mail exploders, newsgroups, or chat rooms. The Court also observed that, as a practical matter, "it would be prohibitively expensive for noncommercial — as well as some commercial — speakers who have Web sites to verify that their users are adults." Thus, the Court concluded that the CDA was not narrowly tailored, because "existing technology did not include any effective method for a sender to prevent minors from obtaining access to communications on the Internet without also denying access to adults." Further, the Court was not convinced that a broad government-mandated curtailment of speech was necessary or desirable given the variety of more narrowly tailored and currently available user-based software applications that enable parents to prevent their children from accessing materials on the Internet that they believe are inappropriate.

The Court also determined that, given the amount of constitutionally protected speech that would fall within the CDA's "patently offensive" and "indecent" categories, the CDA was unconstitutionally overbroad. The government sought refuge from the CDA's over-

491, 504 (1985). The doctrine has been applied in particular where the law regulating speech is criminal in nature. See City of Houston v. Hill, 482 U.S. 451 (1987).
142. See Reno, 521 U.S. at 875. As the Court stated in New York v. Ferber: "It is evident beyond the need for elaboration that a State's interest in safeguarding the physical and psychological well-being of a minor is compelling." New York v. Ferber, 458 U.S. 747, 756-57 (1982) (quoting Globe Newspaper Co. v. Superior Court, 457 U.S. 596, 607 (1982)).
143. Reno, 521 U.S. at 875.
145. Id. at 874-77; see supra notes 28-106 and accompanying text.
146. Reno, 521 U.S. at 876.
147. Id. at 876-77.
148. Id. at 876, 879.
149. Id. at 877-79; supra notes 104-06 and accompanying text.
breadth problems in the statute's affirmative defenses. It urged the Court to hold that “tagging,” for example, was a “good faith, reasonable, effective, and appropriate” action that would provide an affirmative defense to conviction under the CDA. However, the Supreme Court disagreed that the tagging proposal would, or even could, be “effective” given the current state of technology. The Court noted the government’s acknowledgment that the screening software necessary to utilize tagging does not yet exist. Even if such technology were available, the Court concluded that there is no way to ensure that a recipient of information would be using it. Thus, the information provider could not rely upon its tagging to be “effective.”

Similarly, the Court concluded that the affirmative defenses based upon restricting access to materials by means of verified credit cards or adult passwords did not significantly limit the scope of the CDA’s speech restrictions. The Court acknowledged that such verification methods were actually used by some “commercial providers of sexually explicit material,” and that these providers would receive the benefit of an affirmative defense. However, the Court cited the district court’s finding that “noncommercial speakers” could not avail themselves of this defense, because it was not economically feasible for most of them to do so. Even with respect to “commercial” speakers, the Court noted that the government had presented no evidence that currently available verification methods actually would preclude minors from accessing the prohibited speech.

Ultimately, the Court concluded that currently available software technology could not bear the weight the government placed upon it. The technological void led the Court to determine that the CDA swept broadly while allowing Internet speakers little or no chance to comply with its mandates. Further, the Court was not willing to rely upon the government’s optimistic prediction that future technological advances would provide meaningful defenses to the CDA’s prohibitions, which carried severe criminal penalties. In the end, the Court held that the speech restrictions in the CDA were so broad, and would re-

150. Reno, 521 U.S. at 879-81.
151. Id.
152. Id.
153. Id.
154. Id.
155. Id.
156. Id. at 881-82.
157. Id. at 881.
158. Id.
159. Id. at 882.
160. Id. at 879-82.
161. Id. at 881-82.
quire that so much permissible speech be restricted, that they amounted to "burn[ing] the house to roast the pig." Indeed, the Court observed, the CDA was far more dangerous to free speech than other speech-restrictive statutes the Court had invalidated — it "threaten[ed] to torch a large segment of the Internet community." Indeed, the Court observed, the CDA was far more dangerous to free speech than other speech-restrictive statutes the Court had invalidated — it "threaten[ed] to torch a large segment of the Internet community."  

Justice O'Connor, concurring in part and dissenting in part, authored an opinion to explain that she viewed the CDA as "little more than an attempt by Congress to create 'adult zones' on the Internet." She rejected the CDA, because it strayed "from the blueprint our prior cases have developed for constructing a 'zoning law' that passes constitutional muster." Specifically, Justice O'Connor noted that the Court had previously upheld zoning laws: (1) if they did not unduly restrict adult access to constitutionally protected material, and (2) so long as minors have no First Amendment right to view the prohibited material. She agreed with the majority that technological limitations, as they existed in 1997, caused the CDA to fail the first of these limiting principles.

D. DISTINGUISHING REAL SPACE PRECEDENTS

The Court readily distinguished the CDA provisions from speech restrictions it had held were permissible in real space. As I will explain in Part IV, in drafting COPA Congress erred by reading these distinctions too literally, while it ignored the more general reservations articulated by the Court with respect to regulation of Internet speech.

In Ginsberg v. New York, the Court upheld a New York statute that prohibited the sale to minors under seventeen years of age of materials deemed obscene as to such minors even if the same materials were not obscene as to adults. Ginsberg, the proprietor of a lunch counter where certain magazines were also sold, was prosecuted

162. Id. at 882 (quoting Sable, 492 U.S. at 127).
163. Id.
164. Id. at 886 (O'Connor, J., concurring in part, dissenting in part).
165. Id. (O'Connor, J., concurring in part, dissenting in part).
166. Id. at 888 (O'Connor, J., concurring in part, dissenting in part).
167. Id. at 891 (O'Connor, J., concurring in part, dissenting in part).
168. See infra notes 218-55 and accompanying text.
170. Ginsberg v. New York, 390 U.S. 629, 633, 648 (1968). The Court explained in Ginsberg that material is obscene as to minors if it: (1) is "patently offensive to prevailing standards in the adult community as a whole with respect to what is suitable material for minors;" (2) appeals to the prurient interest of minors; and (3) is "utterly without redeeming social importance for minors." Ginsberg, 390 U.S. at 633 (citations omitted).
after he sold several “girlie” magazines to a sixteen-year-old customer.171

The Reno Court distinguished the statute upheld in Ginsberg from the CDA on four separate grounds.172 First, the Court noted that the New York statute, unlike the CDA, did not prohibit parents from purchasing obscene materials for their children should they wish to do so.173 This aspect of the New York law was consistent with the respect the Court has long afforded the principle that “the parents’ claim to authority in their own household to direct the rearing of their children is basic in the structure of our society.”174 Second, the Court noted that “the New York statute applied only to commercial transactions,” while the CDA reached all communications within the prohibited categories transmitted on the Internet.175 Third, unlike the CDA, the New York ban on obscene material was limited to material that was “utterly without redeeming social importance for minors.”176 Fourth, the Court noted that the New York statute was somewhat more narrow in scope than the CDA, in that it defined a minor as a person not yet seventeen years old, whereas the CDA included all those who were under eighteen years of age.177

Justice O’Connor’s critique of the CDA was somewhat different. She distinguished the statute at issue in Ginsberg from the CDA on the ground that the former “operated in the physical world, a world with two characteristics that make it possible to create ‘adult zones: geography and identity.’”178 Thus, while the Ginsberg Court could simply assume that the adult zone created by the New York statute “would succeed in preserving adults’ access while denying minors’ access to the regulated speech,” the Court could not make such an as-

171. Ginsberg, 390 U.S. at 631. The New York statute provided that it was an affirmative defense that (a) the defendant “had reasonable cause to believe that the minor involved was seventeen years or more;” and (b) such minor “exhibited to the defendant a draft card, driver’s license, birth certificate or other official or apparently official document purporting to establish that such minor was seventeen years old or more.” N.Y. Penal Law § 484-h (McKinney 1909). Ginsberg apparently did not assert that the affirmative defenses applied in his case. Thus, the Court had no occasion to comment on them.

172. Reno, 521 U.S. at 865.

173. Id.

174. Ginsberg, 390 U.S. at 639. See Prince v. Massachusetts, 321 U.S. 158, 166 (1944) (“It is cardinal with us that the custody, care and nurture of the child reside first in the parents, whose primary function and freedom include preparation for obligations the state can neither supply nor hinder.”).

175. Reno, 521 U.S. at 865.

176. Id. (citing Ginsberg, 390 U.S. at 646).

177. Id. at 865-66.

178. Id. at 889 (O’Connor, J., concurring in part, dissenting in part).
sumption with respect to the CDA, which operated in a world devoid of the “twin characteristics” of “geography and identity.” 179

The Court also distinguished FCC v. Pacifica Foundation, 180 in which it upheld a declaratory order issued by the FCC that a twelve-minute “Filthy Words” monologue that repeatedly used “certain words referring to excretory or sexual activities or organs” was “indecent” and “patently offensive” as broadcast and could be prohibited from radio airwaves during afternoon hours when children are likely to be in the audience. 181 In Reno, the Court distinguished the order upheld in Pacifica from the CDA on the ground that the FCC order was “issued by an agency that had been regulating radio stations for decades [and] targeted a specific broadcast that represented a rather dramatic departure from traditional program content in order to designate when — rather than whether — it would be permissible to air such a program in that particular medium.” 182 By contrast, the CDA’s prohibitions were not limited to particular times and were not dependent upon any evaluation by an agency or other body familiar with the unique aspects of the Internet. 183 The Court also noted that, unlike the CDA, the FCC’s order was not punitive in nature. 184 Finally, the Court noted that radio had traditionally received the most limited First Amendment protection “in large part because warnings could not adequately protect the listener from unexpected program content.” 185 Relying on the findings of the district court, the Supreme Court explained that the Internet was significantly different from other media in this regard. The Court accepted the district court’s findings that the Internet is not an invasive medium and materials generally do not take users by surprise. 186 Indeed, the Court noted that the district court had found that “the risk of encountering indecent material by accident is remote because a series of affirmative steps is required to access specific material.” 187

E. THE VAGUENESS OF THE CDA

In addition to urging the Court to invalidate the CDA on overbreadth grounds, the plaintiffs also argued that the CDA was too vague to support a criminal prosecution and hence violated the Fifth

179. Id. (O'Connor, J., concurring in part, dissenting in part).
182. Id. at 867.
183. Id.
184. Id.
185. Id. (citing Pacifica, 438 U.S. at 748).
186. Id. at 867.
187. Id.
Amendment.\textsuperscript{188} The Court declined to invalidate the CDA on this alternative ground.\textsuperscript{189} However, it expressed concern that “the many ambiguities concerning the scope of [the CDA’s] coverage render it problematic for purposes of the First Amendment.”\textsuperscript{190}

The Court’s concern that the CDA was unconstitutionally vague centered upon the amorphous nature of the category of speech the CDA purported to prohibit. The Court noted the absence of any definition for the terms “indecent” and “patently offensive,” and the resulting confusion concerning how the standards related to each other.\textsuperscript{191} In addition, the Court rejected the government’s argument that because the CDA’s “patently offensive” provision contained one of the prongs set forth in \textit{Miller v. California}\textsuperscript{192} — that material be “patently offensive” as defined by state law — it could not be deemed unconstitutionally vague.\textsuperscript{193} To the contrary, the Court reasoned that \textit{Miller} had added to the “patently offensive” standard a requirement that the material at issue be “specifically defined by the applicable state law,” a requirement that was lacking in the CDA.\textsuperscript{194} In addition, the Court stated that the inclusion of one part of the three-prong \textit{Miller} test for obscenity did not necessarily save the CDA.\textsuperscript{195} The Court noted that the two requirements that the government left out of the statute — that the material, taken as a whole, appeal to the “prurient interest,” and that it lack “serious literary, artistic, political, or scientific value” — substantially limited the scope of the obscenity definition.\textsuperscript{196}

\textsuperscript{188} Reno, 521 U.S. at 861. The Supreme Court has stated that criminal statutes should be construed with utmost care for clarity, because “[n]o one may be required at peril of life, liberty or property to speculate as to the meaning of penal statutes, and this is particularly true of laws having a potentially inhibiting effect on speech.” Hynes v. Mayor of Oradell, 425 U.S. 610, 620 (1976) (quoting, in part, Lanzetta v. New Jersey, 306 U.S. 451, 453 (1939); Smith v. California, 361 U.S. 147, 151 (1959)).

\textsuperscript{189} Reno, 521 U.S. at 864.

\textsuperscript{190} Id. at 870.

\textsuperscript{191} Id. at 871.

\textsuperscript{192} 413 U.S. 15 (1973). In \textit{Miller}, the Court established the following test for determining whether material is obscene:

\begin{itemize}
  \item (a) whether the average person applying contemporary community standards would find that the work, taken as a whole, appeals to the prurient interest;
  \item (b) whether the work depicts or describes, in a patently offensive way, sexual conduct specifically defined by the applicable state law; and
  \item (c) whether the work, taken as a whole, lacks serious literary, artistic, political, or scientific value.
\end{itemize}

\textit{Reno}, 521 U.S. at 872 (quoting \textit{Miller v. California}, 413 U.S. 15, 24 (1973)).

\textsuperscript{193} Reno, 521 U.S. at 872-73.

\textsuperscript{194} Id. at 873 (citations omitted).

\textsuperscript{195} Id.

\textsuperscript{196} Id.
IV. ROUND II: THE CHILD ONLINE PROTECTION ACT OF 1998 ("COPA")

It did not take Congress long after the Supreme Court invalidated the CDA to enact its second content-based restriction on Internet speech. Despite the serious reservations of his own Department of Justice, President Clinton signed COPA into law on October 21, 1998, approximately fourteen months after the Supreme Court's Reno decision. As with the CDA, it did not take the courts long to block Congress's latest effort to construct a speech zone on the Internet. On February 1, 1999, a federal district court in Pennsylvania preliminarily enjoined enforcement of COPA pending a trial on the merits.

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.

197. In a letter dated October 5, 1998, addressed to Representative Thomas Bliley, Chairman of the House Committee on Commerce, the Justice Department set forth its views concerning COPA. See 144 Cong. Rec. S12796-98 (daily ed. Oct. 21, 1998) (letter from L. Anthony Sutin, Acting Assistant Attorney General). In the letter, the Department expressed several concerns. First, the Department worried that COPA "could require an undesirable diversion of critical investigative and prosecutorial resources that the Department currently invests in combating traffickers in hard-core child pornography, in thwarting child predators, and in prosecuting large-scale and multidistrict commercial distributors of obscene materials." Id. at S12796. Second, the Department expressed doubt as to whether COPA "would have a material effect in limiting minors' access to harmful materials," because the thousands of newsgroups and other Internet fora on which children can access pornography as well as overseas Web sites would not be affected by the law. Id. Third, the Department warned that COPA might not survive strict scrutiny, particularly in light of the Supreme Court's treatment of the CDA in Reno. Id. at S12797. Fourth, and finally, the Department opined that COPA "contains numerous ambiguities concerning the scope of its coverage." Id.

198. See supra note 21 and accompanying text.

199. Hearings were held by the Senate Committee on Commerce, Science, and Transportation on February 10, 1998, and by the Subcommittee on Telecommunications, Trade, and Consumer Protection of the House Committee on Commerce on September 11, 1998. See H.R. Rep. No. 105-775, at 20 (1998). In the latter hearing, Congress received testimony from, among others, a representative of the Federal Bureau of Investigation, the executive director of the Free Speech Coalition, representatives of various Internet security organizations, Professor Larry Lessig of Harvard Law School, and a professor of psychology.
A. THE COPA WEB ZONE

The Reno Court held that Congress had overreached with the CDA primarily because the statute’s speech restrictions threatened a substantial portion of the Internet community with criminal prosecution. In COPA, Congress sought to construct a narrower zone of restricted speech.

COPA’s proposed zone is narrower than the CDA in several respects. It extends only to certain types of speech made on the World Wide Web, and does not cover the entire Internet, as did the CDA. The targeted speech is that which is deemed to include content “harmful to minors” — a phrase defined with specific reference to the Miller test. COPA would prohibit Web publishers who seek to make a profit from distributing “harmful” materials on the Web to anyone under age seventeen. In order to enforce this prohibition, Congress utilized the same approach it had adopted in the CDA — prohibited communications are subject to heavy civil and criminal penalties, unless a Web publisher is protected from conviction by one of the statute’s affirmative defenses, which are discussed below in Part IV(A)(2).

More specifically, COPA imposes criminal and civil penalties on anyone who “knowingly and with knowledge of the character of the material, in interstate or foreign commerce by means of the World Wide Web, makes any communication for commercial purposes that is available to any minor and that includes any material that is harmful to minors.” Persons who violate this provision are subject to a fine of not more than $50,000 and imprisonment not to exceed six months, or both. COPA also imposes a further fine of not more than $50,000 for each “intentional” violation of the above provision. For purposes of the proscription on “intentional” violations, each day of violation is deemed a separate violation. In addition to criminal penalties, COPA imposes civil fines of not more than $50,000 for each violation, Congress again having provided that each day of violation constitutes a separate violation.

1. The Boundaries of the Proposed Zone

COPA contains several definitions that are intended to clarify its scope and to alleviate the concerns raised by the Reno Court. The Act

201. See infra notes 214-17 and accompanying text.
202. COPA (to be codified at 47 U.S.C. § 231(a)(1)).
203. Id.
204. Id. (to be codified at 47 U.S.C. § 231(a)(2)).
205. Id.
206. Id. (to be codified at 47 U.S.C. § 231(a)(2)-(3)).
defines a minor as "any person under 17 years of age." Material that is deemed "harmful to minors" is defined as follows:

Any communication, picture, image, graphic image file, article, recording, writing, or other matter of any kind that is obscene or that — (A) the average person, applying contemporary community standards, would find, taking the material as a whole and with respect to minors, is designed to appeal to, or is designed to pander to, the prurient interest; (B) depicts, describes, or represents, in a manner patently offensive with respect to minors, an actual or simulated sexual act or sexual contact, an actual or simulated normal or perverted sexual act, or a lewd exhibition of the genitals or post-pubescent female breast; and (C) taken as a whole, lacks serious literary, artistic, political, or scientific value for minors.

Under COPA, a person can be penalized for distributing such material "by means of the World Wide Web," which is in turn defined as "by placement of material in a computer server-based file archive so that it is publicly accessible, over the Internet, using hypertext transfer protocol or any successor protocol." COPA seeks to punish only those who make such communications on the Web for "commercial purposes," which means that only those who are "engaged in the business of making such communications" are covered by the Act. COPA's definition of "engaged in the business" is broad. It means:

that the person who makes a communication, or offers to make a communication, by means of the World Wide Web, that includes any material that is harmful to minors devotes time, attention, or labor to such activities, as a regular course of such person's trade or business, with the objective of earning a profit as a result of such activities (although it is not necessary that the person make a profit or that the making or offering to make such communications be the person's sole or principal business or source of income).

Under COPA, a person is deemed to be "engaged in the business" of making the proscribed communications if "the person knowingly causes the material that is harmful to minors to be posted on the World Wide Web or knowingly solicits such material to be posted on the World Wide Web." The Act exempts certain persons from liability, including Internet Service Providers and Web browser services.

207. Id. (to be codified at 47 U.S.C. § 231(e)(7)).
208. Id. (to be codified at 47 U.S.C. § 231(e)(6)) (emphasis added).
209. Id. (to be codified at 47 U.S.C. § 231(e)(1)).
210. Id. (to be codified at 47 U.S.C. § 231(e)(2)(A)).
211. Id. (to be codified at 47 U.S.C. § 231(e)(2)(B)) (emphasis added).
212. Id.
213. Section 231(b) of the Act provides that a person shall not be considered to make any communication for commercial purposes to the extent that such person is:
2. Affirmative Defenses to Conviction

Like the CDA, COPA contains several provisions that purport to allow a defendant to assert affirmative defenses in prosecutions for communicating material that is "harmful to minors" on the Web. These defenses would not, of course, prevent the government from bringing a prosecution under COPA. They would simply provide defenses that, if proven by a defendant, would allow him or her to escape conviction.

COPA sets forth three affirmative defenses that are available to a person who, "in good faith, has restricted access by minors to material that is harmful to minors." First, a defendant may escape conviction "by requiring use of a credit card, debit account, adult access code, or adult personal identification number." Second, persons who "accept[ ] a digital certificate that verifies age" are allowed an affirmative defense to conviction. Third, COPA provides an affirmative defense to anyone who restricts access by minors to "harmful" material "by any other reasonable measures that are feasible under available technology."

B. The Constitutionality of COPA

The Reno decision caused Congress to improve upon the CDA, but none of the alterations it made in COPA cure the problems that doomed Congress' first effort to construct a child-free zone on the Internet. Congress has again failed to appreciate the limitations upon government regulation posed by the unique architecture of the Internet. More fundamentally, Congress erred in reading the Reno decision as an invitation to draft a second Internet speech law rather than a signal from the Supreme Court that the medium, and the technology that is to be applied to it, should be permitted some period of unregu-

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(1) a telecommunications carrier engaged in the provision of a telecommunications service; (2) a person engaged in the business of providing an Internet access service; (3) a person engaged in the business of providing an Internet information location tool; or (4) similarly engaged in the transmission, storage, retrieval, hosting, formatting, or translation (or any combination thereof) of a communication made by another person, without selection or alteration of the content of the communication, except that such person's deletion of a particular communication or material made by another person in a manner consistent with subsection (c) or section 230 shall not constitute such selection or alteration of the content of the communication.

Id. (to be codified at 47 U.S.C. § 231(b)). “Internet,” “Internet Access Service,” and “Internet Information Location Tool” are defined elsewhere in the Act. See id. (to be codified at 47 U.S.C. § 231(e)(3)-(5)).

214. COPA (to be codified at 47 U.S.C. § 231(c)(1)).
215. Id. (to be codified at 47 U.S.C. § 231(c)(1)(A)).
216. Id. (to be codified at 47 U.S.C. § 231(c)(1)(B)).
217. Id. (to be codified at 47 U.S.C. § 231(c)(1)(C)).
lated development. In addition, while COPA addresses some of the vagueness problems that doomed the CDA, the statute presents its own troublesome ambiguities.

1. Responding to Reno

In enacting COPA, Congress sought in several respects to respond principally to the Reno Court's holdings that the CDA was not narrowly tailored to serve the government's compelling interest in protecting children and was unconstitutionally overbroad. It began with the geographical scope of the law. Congress limited the breadth of COPA by applying its prohibition only to materials posted on the Web. Unlike the CDA, COPA does not appear to apply to content distributed through other aspects of the Internet, such as e-mail and newsgroups. 218

Responding to the Reno Court's criticism that the CDA applied to commercial and non-commercial speakers alike, 219 Congress attempted in COPA to regulate only harmful communications that are made "for commercial purposes." According to the legislative history, Congress did not believe that COPA would prohibit or have any effect upon non-commercial activities on the Web. 220 Congress also believed that the commercial entities it sought to regulate are currently able to verify the age of users through verified credit cards or other means. 221

Congress also sought to narrow the scope and effect of COPA by purporting to regulate only a particular category of non-obscene speech — speech "harmful to minors" — that is arguably narrower than the "indecent" and "patently offensive" speech it sought to regulate under the CDA. In formulating this standard, Congress also responded to the Reno Court's concern that the "patently offensive" and

218. COPA applies to written communications and, as noted in Part II, e-mail and chat rooms constitute a portion of the Web's geography. See supra notes 66-69 and accompanying text. Thus, it is not altogether certain that one who publishes material that is "harmful to minors" via e-mail would not be subject to prosecution under the Act. Of course, the person would escape conviction if he were not "engaged in the business" of making communications that include material that is "harmful to minors."

219. See Reno, 521 U.S. at 877 (stating that the "breadth of the CDA's coverage is wholly unprecedented. Unlike the regulations upheld in Ginsberg and Pacifica, the scope of the CDA is not limited to commercial speech or commercial entities. Its open­ended prohibitions embrace all nonprofit entities and individuals posting indecent messages or displaying them ... in the presence of minors").

220. See H.R. Rep. No. 105-775, at 7 (1998) ("[COPA] does not prohibit non-commercial activities over the Web, or over the Internet for that matter, and thus the concerns raised by the Supreme Court are no longer applicable."); Id. at 8 (stating COPA "does not affect noncommercial speech").

221. See H.R. Rep. No. 105-775, at 8 ("[COPA] provides a legitimate defense for commercial purveyors of pornography."); Id. at 10 (noting that COPA provides Web publishers with "a host of good faith defenses from prosecution if they adopt reasonable measures to restrict a minor's access to material that is harmful").
"indecent" language that was used in the CDA was too vague to place speakers on notice of what speech was prohibited. Material that is "harmful to minors" is defined by incorporating the Miller obscenity test, as modified by the Supreme Court's holdings in 

Ginsberg v. New York and other cases, that minors may be denied access to speech that is constitutionally protected as to adults.

Finally, Congress sought to alleviate the Supreme Court's concern that the CDA denied parents the right to maintain ultimate control in rearing their children. Under the CDA, a parent who purchased "indecent" or "patently offensive" materials for a child would be subject to the Act's penalties. Unlike the CDA, COPA does not prohibit parents from purchasing material deemed "harmful to minors" for their children who are under the age of seventeen.

2. High Hurdles for Internet Speech Restrictions

While Congress altered COPA in various respects to meet the Reno Court's criticisms, it did not abandon the fundamental approach to Internet speech regulation that it adopted in the CDA. Like the CDA, COPA is a criminal statute, which poses a very strong risk that speakers will remain silent rather than post words, images, or ideas on the Web that might fall within COPA's restrictions. Neither the regulatory landscape nor the medium has changed in any significant respect since the CDA was invalidated. COPA, like the CDA, and unlike the FCC order upheld in Pacifica, is an attempt to regulate a new communications medium that has no history of government regulation, has low access barriers, and is not characterized by the invasive nature of its content.

Like its predecessor, COPA is a content-based regulation of constitutionally protected speech. As such, COPA will be treated by the courts as presumptively invalid. This presumption of invalidity is especially difficult to overcome in COPA's case, as COPA criminalizes material that is constitutionally protected for adults. Although COPA's "harmful to minors" standard is arguably narrower than the categories of "indecent" and "patently offensive" speech regulated by the CDA, there is no doubt that like the restrictions in the CDA, COPA limits speech that is constitutionally protected as to adults.

222. Reno, 521 U.S. at 870-74.
223. See supra note 166 and accompanying text.
225. Reno, 521 U.S. at 865.
226. Id.
227. Id. at 872.
228. Id. at 868 (citing Turner Broad., 512 U.S. at 637-38; Sable Communications, 492 U.S. at 128; Red Lion Broad., 395 U.S. at 366).
COPA's prohibition on material that is "harmful to minors" applies to any "communication, picture, image, graphic image file, article, recording, writing, or other matter" that meets the "harmful to minors" standard. Material is "harmful to minors" if it: (1) "with respect to minors, is designed to appeal to ... the prurient interest;" (2) is "patently offensive with respect to minors;" and (3) "lack[s] serious ... value for minors." Thus, the definition of "harmful to minors" expressly requires that the speaker take into account the impact of the speech on minors, not on adults. There is a large category of speech, for example, that is not "patently offensive" for adults to communicate and receive, and that has value when communicated to adults, but that many communities may believe is offensive and lacks value when communicated to minors. Further, Congress substantially expanded the category of proscribed speech by failing to distinguish between material that lacks value for a sixteen-year-old and material that lacks value for a younger child. Under COPA, speakers are at risk if they communicate material that could be deemed harmful to an eight-year-old user.

Given these similarities to the CDA, there is no reason to believe that courts will treat COPA any differently by implementing a standard of review less onerous than strict scrutiny. Thus, COPA will stand only if it is justified by a compelling governmental interest and is "narrowly tailored" to effectuate that interest.

3. The (Over) Breadth of the COPA Zone

It will not be difficult for the government to satisfy the "compelling interest" prong of strict scrutiny review. The Supreme Court accepted in Reno, as it had on many prior occasions, that the government's interest in protecting at least younger children from harmful materials they may encounter on the Internet is a compelling

229. See COPA (to be codified at 47 U.S.C. § 231(e)(6)).
230. See id.
231. The district court that granted a temporary restraining order against enforcement of COPA assumed that strict scrutiny should be applied to COPA. See ACLU v. Reno, No. 98-5591 (E.D. Pa. Nov. 20, 1998) (on file with author). See also Reno, 521 U.S. at 868, 870 (concluding that case law provided "no basis for qualifying the level of First Amendment scrutiny that should be applied to this medium"). The government may argue that COPA, which on its face seeks to prohibit only speech made "for commercial purposes," is a regulation of so-called "commercial speech," and therefore should be subjected to lesser First Amendment scrutiny. Even assuming that the government could demonstrate that COPA narrowly targets so-called "commercial speech," under the Supreme Court's precedents the level of scrutiny does not depend so much upon the nature of the speech as upon the nature of the medium of expression. See id. at 868, 870. Because COPA is a content-based restriction of speech on the Internet, it should be subjected to the most exacting judicial scrutiny.
232. See Sable, 492 U.S. at 126.
one.\textsuperscript{233} Thus, as with the CDA, parties litigating the constitutionality of COPA will join issue at the point where the courts must determine whether the statute is narrowly tailored to achieve Congress' compelling objective.\textsuperscript{234}

Congress' effort to build an "adults only" zone on the Web that resembles a real-space zone encounters two related, fundamental flaws in cyberspace. The first problem is that regardless of Congress' intent, COPA's definition of Web speech made "for commercial purposes" will have a substantial effect on speech communicated over the Web for free. The second problem, which is related to the first, is that while all of the changes to the statutory language noted above represent modest improvements over the CDA, none successfully addresses the fundamental difficulties that the absence of geography and identity on the Internet pose for the regulation of cyber-speech. Despite the Reno Court's strong message that the technology does not yet exist to support the type of affirmative defenses Congress would subsequently incorporate into COPA, Congress nonetheless proceeded on the assumption that these affirmative defenses would be widely available to protect the targeted "commercial" speakers from conviction.\textsuperscript{235} As I will demonstrate, however, Congress' mis-interpretations of COPA's breadth and effect were errors of constitutional dimension. COPA's ultimate effect will be to silence a substantial number of speakers, who will be unable to find cover in the statute's affirmative defenses and therefore will be forced to resort to self-censorship.

\textbf{a. The Intractable Overbreadth Problem}

As the district court observed in Reno, the content of speech on the Web, which is provided by millions of users worldwide, "is as diverse as human thought."\textsuperscript{236} It ranges from art, to humor, to literature, to medical information, to music, to news, to sexually oriented material. For example, on the Web one can view the full text of the Bible, read the New York Times, or browse through paintings from art galleries around the world.

Congress's apparent intent was to apply COPA's speech restrictions narrowly to only those online vendors who sell pornographic

\begin{footnotesize}
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\textsuperscript{233} See Reno, 521 U.S. at 875; New York v. Ferber, 458 U.S. 747, 756-57 (1982) ("It is evident beyond the need for elaboration that the State's interest in safeguarding the physical and psychological well-being of a 'minor' is 'compelling.'") (quoting Globe Newspaper Co. v. Superior Court, 457 U.S. 596, 607 (1982)). \\
\textsuperscript{234} See Sable, 492 U.S. at 126 (noting that government may effectuate even a compelling interest only "by narrowly drawn regulations designed to serve those interests without unnecessarily interfering with First Amendment freedoms"). \\
\textsuperscript{235} Reno, 521 U.S. at 881-82. \\
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materials "for commercial purposes." If that was the intent, however, Congress failed to effectuate it in the text of the statute itself. Instead, Congress drafted the statute in such a way as to cover all persons who make "any communication for commercial purposes that is available to any minor and that includes any material that is harmful to minors."237 Under the plain language of COPA, a speaker is subjected to civil and criminal penalties if, as a regular course of business, he communicates any material for commercial purposes on the Web that includes any material — even a single description or photograph — that is harmful to minors. In addition, Congress forbade in COPA the transmission of purely "written" materials that are "harmful to minors."238 If its intent was to target commercial pornographers, Congress failed to draft a statute to effectuate this intent.

In any event, Congress wrote the commercial/non-commercial dichotomy into COPA as a direct response to the Supreme Court's statement in Reno that the CDA was overbroad because it applied to "non-commercial" as well as "commercial" speakers.239 The Court found this distinction relevant, in part, because financial costs and burdens are a relevant consideration in determining whether a speech-restrictive law uses the least restrictive means to prohibit the targeted speech.240 As the Reno Court noted, the substantial number of publishers who provide their content on the Internet for free would be financially incapable of implementing the technology required under the CDA's affirmative defenses, and thus would be subject to criminal conviction.241

Some purveyors of sexually explicit material charge their users for access to their sites by requiring that users "present" a credit card before entering. These are apparently the "commercial" speakers Congress sought to target when it drafted COPA, and to whom COPA provides an affirmative defense to conviction.242 However, what

237. COPA (to be codified at 47 U.S.C. § 231(a)(1)) (emphasis added).
238. See id. (to be codified at 47 U.S.C. § 231(e)(6)).
239. See Reno, 521 U.S. at 865.
240. Id. at 874-79. See Erznoznik v. City of Jacksonville, 422 U.S. 205, 217 (1975) (finding unconstitutional deterrent effect on free speech where, to avoid prosecution, theater owners were required either to "restrict their movie offerings or [to] construct adequate protective fencing which may be extremely expensive or even physically impracticable"); Simon & Schuster, Inc. v. Members of the N.Y. State Crime Victims Bd., 502 U.S. 105, 115, 116 (1991) ("A statute is presumptively inconsistent with the First Amendment if it imposes a financial burden on speakers because of the content of their speech" because such a regulation "raises the specter that the government may effectively drive certain ideas or viewpoints from the marketplace.").
242. See COPA (to be codified at 47 U.S.C. § 231(c)) (declaring that those who sell their content on the Web are provided with an affirmative defense when the buyer pays by credit or debit card). The government will likely urge the courts to construe COPA so as to apply only to the commercial sale of "pornography." However, the "engaged in the
Congress (and perhaps the Court\textsuperscript{243}) did not understand is that the overwhelming majority of information on the Web is provided for free to users by entities who may happen to be communicating on the Web "for commercial purposes," as that phrase has been defined by Congress.\textsuperscript{244}

Like many traditional, real space print newspapers, bookstores, and magazine publishers, many Web publishers make a profit, or attempt to make a profit, through advertising. In addition, cyberspace content providers such as online booksellers, music stores, and art vendors allow potential customers to browse their content for free—similar to browsing in a real space book store or art gallery. Finally, some Web publishers make a profit by charging their content contributors, although users may access the content on their sites for free.

Thus, there is a vast amount of information on the Web that is provided to users for free by entities who operate "with the objective of earning a profit."\textsuperscript{245} Much of this information, particularly that which concerns matters of sexuality, might be deemed "harmful to minors" in some communities. For example, a Web user can access the entire Starr Report concerning President Clinton's sexual relationship with an intern and any related discussions, explicit safer-sex information, pictures by well-known artists such as Robert Mapplethorpe and Andres Serrano, and videos about AIDS. So long as the provider of such content sought in some manner to make a profit from its Web site, COPA would prohibit distribution of this information to adults and

\textsuperscript{243} The Court in \textit{Reno} was not confronted with a statute that made any effort to distinguish between those who provided content for free and those who sought to make a profit from their content. The Court did, however, note that the expense of complying with the CDA would have been prohibitive even for some "commercial" content providers. See \textit{Reno}, 521 U.S. at 876-77.

\textsuperscript{244} COPA does not require that a content provider devote the majority of its time or Web site space to speech that is "harmful to minors." A provider is "engaged in the business" of making harmful speech so long as he or she "devotes time, attention, or labor" to making such speech "as a regular course of such person's trade or business." COPA (to be codified at 47 U.S.C. § 231(e)(2)(B)). Nor is it necessary that the information provider be profitable in such endeavors. See id. (declaring that for liability to attach, it is "not necessary that the person make a profit").
children alike, unless the publisher is able to take advantage of one of COPA's affirmative defenses to conviction.246

A description of a few of the seventeen plaintiffs in the current lawsuit seeking to block COPA from taking effect demonstrates that Congress' commercial/non-commercial dichotomy is unworkable in cyberspace and encompasses within COPA's prohibitions a wide range of speech that does not constitute pornography sold for profit by online smut vendors.247 Androgyny Books, d/b/a A Different Light Bookstores, one of the plaintiffs in the pending lawsuit, maintains a Web site through which visitors can purchase books and music of interest to gay and lesbian individuals and can receive information about the gay and lesbian community, some of which may be deemed "harmful to minors" under COPA. Visitors to this Web site may browse the "bookshelves" located on the site for books about gay and lesbian issues or by gay and lesbian authors. In addition, the Web site offers book reviews and publishes essays and book excerpts which may contain material that is "harmful to minors." Users may currently visit the Androgyny site anonymously and need present a credit card only if they wish to make a purchase.

ArtNet Worldwide Corporation, another plaintiff challenging COPA, is the leading vendor of fine art on the Web. The ArtNet site allows users to view, free of charge, samples of art available at auctions, fairs, and museum shows. The site also contains postings of individual artists, who describe their art and exhibit individual works for sale. Some of the items displayed on the ArtNet site for free may be considered "harmful to minors." In addition, the ArtNet site contains a magazine providing news articles, editorials, and art criticism written by its own correspondents and gathered from external sources, as well as chat rooms where users can promote their own art and discuss art in general. ArtNet funds its site by selling space on it to advertisers and to sellers of art and related items, such as artists and galleries.

Addazi, Inc., d/b/a Condomania, maintains a Web site that focuses on assisting customers in learning about and purchasing condoms and safer sex products. The site contains an online catalog featuring over 250 items, the latest safer sex information, regularly updated newsletters and editorials, and company information. It also includes a seventeen-page Condomania Safer Sex Manual, which uses frank language to educate and help people understand safer sex issues.

246. Recall that COPA targets both written and visual expression. See COPA (to be codified at 47 U.S.C. § 231(e)(6)).

Much of the information provided on the Condomania site may be deemed "harmful to minors." As on the Androgyny and ArtNet sites, users access the Condomania site anonymously and are asked to present a credit card only at the point where they reach the "checkout" portion of the site to make purchases.

Under COPA, all of the information on these and a host of similar sites, regardless of its educational or other value, would be unavailable to users. As I explain in the next section, most of these vendors, like the vendors with whom the Supreme Court was concerned in *Reno*, cannot comply with the requirements of COPA's affirmative defenses and must therefore shut down or face criminal prosecutions and heavy fines. Thus, COPA has the effect of censoring the array of free content on these sites as a consequence of their "seeking to make a profit" from advertising or other sources.

In choosing to codify the commercial/non-commercial dichotomy in COPA, Congress has demonstrated the difficulty with transporting principles that work well in real space into the realm of cyberspace. Few, if any, purveyors of pornography in real space distribute materials free of charge. Indeed, in most cases real space purveyors of pornographic materials exist for only one purpose — to sell pornography for profit. As they do not give their products away, we can assume that a law aimed at the "sale" of pornography will affect these businesses, and only these businesses. The legislature can require, for example, that these businesses place sexually explicit ("harmful") images they wish to sell to the public behind the counter.

In cyberspace, however, many Web sites do not exist solely to sell the "harmful" materials proscribed by COPA. Their Web sites exist for other purposes, such as to educate the public on matters of birth control, sexuality, or other topics unsuitable for consumption by children. Indeed, they may not sell their content at all, relying instead upon advertising revenues to support the distribution of free content. Nor can publishers of these Web sites place "harmful" items (assuming they can be identified with some precision) "behind the counter" without depriving adults — and perhaps older children — of constitutionally protected speech.

There is a significant difference between the impact of speech restrictive laws that are aimed at "commercial" speakers in real space and the effect similar laws will have on cyber-speakers who "seek to make a profit." The architecture of real space allows vendors to discriminate in the distribution of "harmful" material at the point of

248. The "value to minors" prong of COPA's "harmful to minors" definition does not exclude material that has "educational" or "medical" value for minors. See COPA (to be codified at 47 U.S.C. § 231(e)(6)).
purchase.249 Stated somewhat differently: "porn in real space regulates itself."250 Adults and children alike can generally browse the aisles of a real space bookstore, with adults, but not children, being permitted to purchase certain materials.251 Porn in cyberspace does not self-regulate. Because cyberspace, as it now exists, allows everyone to travel and browse anonymously, one can browse the wares of a site without anyone even knowing you were in the store. The only fool-proof way to ensure that minors are not browsing is to deny access to adults as well.

The statute upheld in Ginsberg v. New York,252 for example, prohibited the direct commercial sale of "harmful" magazines to minors, but did not ban any communications between adults.253 Indeed, the Ginsberg Court noted that the statute was valid because it "does not bar the appellant from stocking the magazines and selling them" to adults.254 The New York Legislature was reasonably confident that proprietors could distinguish between children and adults at the point of sale of "harmful" materials. COPA, by contrast, would prohibit the communication of information and ideas before any sale was even contemplated. It would require that proprietors of all establishments, whether or not of an "adult" variety, prohibit anyone from so much as entering their establishments without first presenting identification proving that they were seventeen years of age or older. COPA would, in effect, prohibit the practice of browsing free content, which is one of the unique characteristics of Web surfing.

In sum, Web speech, at least as it is currently communicated, does not permit Congress to regulate "commercial" speech without also substantially suppressing materials that are distributed without charge. Like the CDA, COPA fails to distinguish between commercial entities that actually sell information or products over the Internet and businesses that disseminate free information about their services or products. The Internet has allowed many small businesses to prosper precisely because they can provide information about their serv-

249. Lawrence Lessig, Reading the Constitution in Cyberspace, 45 Emory L.J. 869, 886 (1996).
250. Lessig, 45 Emory L.J. at 886. It does so, as Professor Lessig notes out, "through social structures and social norms, some actively construed, others evolutionary, that channel porn in real space to a particular place in real space, and discriminate with some effectiveness in its distribution in that real space." Id. at 885-86.
251. Again, given the architectural attributes of real space, it may be possible to shield children from browsing certain materials while allowing adults to freely do so, such as by creating a separate room for adult-oriented materials. The architecture of cyberspace does not allow such discrimination; once a user accesses a Web site, he or she cannot be prohibited from any portion of the site.
254. Ginsberg, 390 U.S. at 634-35.
ices at little or no cost to users. COPA would destroy these low entry barriers, thus silencing many speakers and reducing the breadth of diversity and information on the Internet, by forcing speakers like the New York Times, NetArt, and others to charge for all of their speech. COPA does nothing to assuage the concern articulated by the Supreme Court in Reno that Congress is threatening to punish a substantial number of publishers who distribute information on the Web for free.255

b. State-of-the-Art Meets State of the Law

As it did with the CDA, the government will again attempt to limit the potential breadth and effect of its new speech-restrictive legislation by resorting to the Act's affirmative defenses. Reno demonstrated, however, that the government's power to regulate Internet speech is contingent upon the widespread availability of technology capable of effecting the architectural changes necessary for constitutionally precise discrimination in the access to and distribution of "harmful" materials on the Web.256 As Professor Lessig has stated:

If it is extremely cheap perfectly to discriminate in who hears what, then there will be no constitutional problem with a regulation that requires perfect discrimination. The Constitution kicks in only when the technologies are not so perfect: When to comply with a legitimate objective (to protect children), one must sacrifice interests not within the objective (to make smut available to adults). In those cases, Congress's power to protect children is limited by the First Amendment rights of the adults.257

The technology, as it currently exists, does not facilitate the regulation that COPA mandates. Congress, in other words, has once again failed to respect the current technological limitations on zoning speech on the Web. When combined with the unworkable commercial/non-commercial dichotomy in COPA, this technological gap lays bare Congress's inability to grapple with the Internet's pornography problem without suppressing a substantial amount of constitutionally protected communication.

COPA applies to all communications on the Web that are "available to any minor."258 As the Reno Court noted, "existing technology [does] not include any effective method for a sender to prevent minors from obtaining access to its communications on the Internet without

255. Reno, 521 U.S. at 876-79.
256. Id. at 881-82.
257. Lessig, 45 Emory L.J. at 885.
258. COPA (to be codified at 47 U.S.C. § 231(a)(1)).
also denying access to adults. Currently available technology, which was discussed in Part II, provides no reasonable means for speakers to make their speech "available" only to adults. Engineers continue to develop "tagging," rating, and DNS technology, but the prerequisites for establishing effective adults-only zones based on this technology do not yet exist. There is still no widespread agreement on how to "rate" or "tag" Web content, and relatively few Web publishers are employing these largely experimental methods. In addition, the user-based software necessary to ensure that children are denied access to the tagged or rated content has not yet been developed. From the perspective of Web speakers, the information that they make available on the public spaces of the Web must be made available either to all users of the Web, including users who may be minors, or not at all.

One of COPA's defenses applies if a defendant restricts access by "requiring use of a credit card, debit account, adult access code, or adult personal identification number." As noted in Part II, a defense based upon credit card verification is unavailable to the millions of Web speakers who publish through commercial online services such as America Online and Prodigy Internet, because there is no technology that would enable credit card verification by those speakers. Further, the credit card defense is effectively unavailable to providers of free content because, again as noted in Part II, financial institutions charge to verify a credit card. The cost of credit card verification will impose devastating economic burdens on speakers and other content providers who want to provide their speech for free. If speakers absorbed the costs of credit card verification themselves, rather than passing them along to users, some speakers with controversial content would risk economic sabotage — users who disapproved of their speech could simply access their site again and again in order to drive up the cost of verification. The courts have routinely struck down such economic burdens on the exercise of protected speech.

259. Reno, 521 U.S. at 876.
260. See supra notes 28-106 and accompanying text.
261. COPA (to be codified at 47 U.S.C. § 231(c)(1)).
262. See supra notes 77-81 and accompanying text.
263. See Reno, 521 U.S. at 856-57 ("Credit card verification is only feasible, however, ... in connection with a commercial transaction in which the card is used. ... ").
264. The economic burdens would include the costs of special software applications and secure servers, as well as the costs of verification. Affidavits submitted by plaintiffs in the lawsuit challenging COPA estimate that the cost for credit card verification could be as high as $200,000 per month for a site that receives approximately 100,000 users per month.
265. See Erznoznik, 422 U.S. at 217 (invalidating a city requirement that outdoor theater owners "construct adequate protective fencing which may be extremely expensive or even physically impracticable"); Simon & Schuster, 502 U.S. at 115-16 ("A stat-
Validation by debit card⁶⁻⁶ would also require a financial transaction, and thus, is unavailable to content providers who provide their speech for free. Similarly, requiring speakers to set up an adult identification system⁶⁻⁷ or a system to accept “digital certificates”⁶⁻⁸ before they can provide free content is technologically and economically infeasible for the vast majority of content providers covered by COPA. As the district court pointed out in Reno, the cost of creating and maintaining an age verification system “would be prohibitive even for a commercial entity such as HotWired, the online version of Wired magazine.”⁶⁻⁹ What is more, age verification requirements would likely have an adverse effect on revenue for “commercial” content providers, as advertisers depend upon a demonstration that the sites are widely available and frequently visited.⁶⁻⁰

Digital certificate technology, another defense held out by COPA, is not currently in widespread use, and may not become universally adopted for a considerable time, if ever. COPA also provides a “catch-all” type of affirmative defense for Web publishers who take “other reasonable measures that are feasible under available technology”⁶⁻¹ to restrict access to materials by minors. As noted in Part II, however, there are currently no other “reasonable measures” that allow content providers to limit their speech to adults.⁶⁻² The “catchall” defense in fact catches nothing. Both the digital certificate and “other reasonable measures” defenses, therefore, depend entirely upon the prospects of future technology. Just as the Reno Court rejected the argument that future technological advances could be used to narrow the CDA, so too will courts find the government’s rosy predictions of prospective tech-

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²⁶⁶. See COPA (to be codified at 47 U.S.C. § 231(c)(1)(A)).
²⁶⁷. See id.
²⁶⁸. See id. (to be codified at 47 U.S.C. § 231(c)(1)(B)).
²⁷⁰. As the Pennsylvania district court recently concluded in granting a preliminary injunction against enforcement of COPA:
Evidence presented to this Court is likely to establish at trial that the implementation of credit card or adult verification screens in front of material that is harmful to minors may deter users from accessing such materials and that the loss of users of such material may affect the speakers’ economic ability to provide such communications... The plaintiffs are likely to establish at trial that under COPA, Web site operators and content providers may feel an economic disincentive to engage in communications that are or may be considered to be harmful to minors and thus, may self-censor the content of their sites.
²⁷¹. COPA (to be codified at 47 U.S.C. § 231(c)(1)(C)).
²⁷². See supra ntos 73-75 and accompanying text.
nological advances insufficient to justify Congress's latest attempt to enact a statute criminalizing speech. Future technology cannot save a statute that criminalizes a wide array of speech today.

On a more fundamental level, affirmative defenses do little to limit the inevitable chilling effect that the threat of criminal prosecution will inevitably have on free speech. Once a criminal prosecution begins, it is small consolation to a defendant that he or she may prove innocence by falling into one of the "safe harbors" provided by COPA. Moreover, COPA's defenses are no more available for the vast majority of Web speakers than those found wanting in Reno. In fact, none of COPA's affirmative defenses are available to the Web speakers who are likely to be most affected by the statute — those who provide content for free, but who seek to make a profit from their sites. These speakers are left with no way to comply with COPA. Thus, they are left with two equally untenable alternatives: (1) risk prosecution and heavy civil penalties under COPA, or (2) attempt to engage in self-censorship and thereby deny adults and older minors access to constitutionally protected speech.

Congress assumed, incorrectly, that COPA's affirmative defenses would be widely available to most Web content providers. That assumption was, in turn, based upon an underlying assumption that COPA would not affect persons who provide free content on the Web. Those who sell pornographic content for a living, Congress apparently reasoned, can afford to limit their audience by credit card or some other form of age verification. As I have explained, however, Congress' underlying assumption was also a fatal miscalculation. By sweeping within the definition of "commercial" speech a substantial number of speakers who seek to make a profit, but nevertheless provide content on the Web for free, Congress effectively eviscerated the affirmative defenses provided by COPA for millions of Web speakers.

Oddly, it appears that Congress recognized that it was regulating in disregard of technological advances. At the same time it enacted COPA, Congress created a temporary "Commission on Online Child Protection"273 for the purpose of "conducting a study . . . regarding methods to help reduce access by minors to material that is harmful to minors on the Internet."274 Congress charged the Commission with identifying and analyzing the various technological tools and methods for protecting minors from harmful material, many of which were dis-

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273. The Commission is to be composed of nineteen members chosen from a cross-section of the Internet business community, including Internet access services, representatives of businesses that provide Internet filtering or blocking services, content providers, and persons engaged in the business of providing ratings, labeling, and domain name services. See H.R. Rep. No. 105-11242 § 1406(c) (1998) (uncodified).

cussed in Part II of this article, including filtering or blocking software, age verification systems, rating systems, the establishment of a domain name for posting any material that is harmful to minors, and any other existing or proposed technologies.275

Thus, Congress created a commission to study after the enactment of a restrictive criminal statute what it undoubtedly should have studied beforehand: the technology available to restrict minors' access to "harmful" materials on the Internet, and the costs associated with that technology. Armed only with whatever technological background knowledge it had when the CDA was passed, Congress mistakenly proceeded in literal fashion to tinker with the language of COPA to address some of the Reno Court's concerns. Legislators failed, however, to heed the Court's broader warning that they must proceed with the utmost caution and become fully informed of the state of cyberspace technology before regulating the content of speech on this vast new communicative medium, particularly if the government regulation is to take the form of a criminal statute. Contrary to the Supreme Court's clear directive, Congress' Internet speech restriction has once again outpaced the state-of-the-art.

The Supreme Court has held that "[t]he level of discourse reaching a mailbox simply cannot be limited to that which would be suitable for a sandbox."276 Because COPA, like the CDA, would result in limiting communications on the Web to those suitable only for children, it is not a narrowly tailored method for protecting children from "harmful" materials.277 Thus, the fatal constitutional flaw for COPA, as it was for the CDA, is that "in order to deny minors access to potentially harmful speech," the law "effectively suppresses a large amount of

275. In analyzing these technologies, the Commission is required specifically to examine the costs associated with the various methods of restricting minors' access to harmful materials, the effects of those technologies on users' privacy, and the extent to which harmful material is globally distributed and the effects of existing and proposed technology on such distribution. See H.R. Rep. No. 105-11242 § 1406(c). The Commission is required to submit a report to Congress containing the results of its study within one year of COPA's enactment.


277. In addition to limiting adults' access to constitutionally protected speech, COPA also restricts access by older minors to speech that is constitutionally protected as to them. COPA draws no distinction between minors who are six or eight years old and those who are sixteen or seventeen years old. Information concerning topics such as gay and lesbian issues, safe sex, and women's health may be deemed "harmful" to younger minors, but would be quite valuable to older minors. The First Amendment protects the rights of minors to receive information and ideas necessary to their development and participation as citizens. See Carey v. Population Servs., Int'l, 451 U.S. 678, 693, 700-02 (1977).
speech that adults have a constitutional right to receive and to address to one another."278

4. Efficacy And Less Restrictive Alternatives

Apart from its overbroad scope, COPA is an ineffective means of achieving the government's asserted interest in protecting children from "harmful" materials. Strict scrutiny requires that a law be invalidated "if it provides only ineffective or remote support for the government's purpose."279 Under this analysis, the government must demonstrate that a statute will in fact alleviate the alleged harms in a "direct and material" way.280

It appears that Congress, in enacting COPA, sought primarily to prohibit the distribution of "pornographic" images over the Web by commercial pornographers. Even if it can be assumed that Congress's intent may be so narrowly construed, the statute would have little effect even on this limited category of "harmful" materials. Existing laws already punish the distribution and importation over the Internet of the most "harmful" material — "obscenity" and "child pornography."281 The vast majority of the remaining category of "harmful" material is not provided on the Internet for free, but rather is provided only after a fee is paid. Thus, ironically, purveyors of this material are already purportedly protected under COPA's credit card affirmative defense. COPA also allows the distribution of pornography so long as it is communicated by "noncommercial" entities. Thus, the only "harmful" material really affected by COPA's prohibitions is that which is provided for free and conveys frank, useful information concerning matters of sexuality. Finally, even as to the so-called "commercial" sites, many minors have access to credit cards, and there is no evidence that an artful minor could not pose as an adult in order to gain access to "harmful" material.

In addition, Congress also left unresolved another significant problem with the CDA — the regulation of "harmful" materials posted abroad. The nature of the Web makes it highly unlikely that COPA will be effective at ridding it of "harmful" material. The Web, like the

278. Reno, 521 U.S. at 874.
281. See 18 U.S.C. § 522 (1994 & Supp. III 1997) (addressing the importation of obscenity); Id. § 1460 (addressing obscenity); Id. § 2251 (dealing with child pornography).
Internet as a whole, is global in nature. Thus, material posted on the Web by an overseas speaker will be just as available to minors as material that is posted in the United States. COPA, like the CDA, will not prevent minors from gaining access to the large percentage of material that originates abroad.\footnote{282}{See Reno, 521 U.S. at 878 n.45.}

In reality, therefore, COPA will prevent minors from accessing only a very small category of “harmful” materials (while at the same time having the unconstitutional effect of preventing adults and older minors from receiving and communicating constitutionally protected materials). Minors would be prohibited from accessing only material that: (1) is not already illegal under existing obscenity and child pornography laws; (2) does not require payment; (3) is not communicated by amateurs with no profit motive; and (4) is not provided by overseas content providers.\footnote{283}{The Justice Department opined that diverting law enforcement resources from ongoing criminal obscenity investigations to COPA prosecutions would be particularly ill-advised given the uncertainty concerning COPA’s efficacy. The Department stated in its letter to Congress:

There are thousands of newsgroups and Internet relay chat channels on which anyone can access pornography; and children would still be able to obtain ready access to pornography from a myriad of overseas web sites. The COPA apparently would not attempt to address those sources of Internet pornography . . . .

The practical or legal difficulty in addressing these considerable alternative sources from which children can obtain pornography raises questions about the efficacy of the COPA and the availability of expending scarce resources on its enforcement.

See 144 Cong. Rec. S12796 (daily ed. Oct. 21, 1998) (letter from L. Anthony Sutin, Acting Assistant Attorney General).} As the government cannot meet its burden of establishing that COPA alleviates the alleged “harm in a direct and material way,”\footnote{284}{Turner Broad., 512 U.S. at 664.} COPA leaves “appreciable damage to [the] supposedly vital interest unprohibited.”\footnote{285}{Florida Star, 491 U.S. at 541-42.}

To survive strict scrutiny, COPA must not only be an effective means, but also the least restrictive means, of achieving Congress’ objective.\footnote{286}{See Sable, 492 U.S. at 126 (“It is not enough to show that the Government’s ends are compelling; the means must be carefully tailored to achieve those ends.”).} However, as discussed in detail in Part II, there are a host of alternative means available that restrict minors’ access to “harmful” material without preventing adults from accessing such material. America Online and Prodigy, for example, offer features that prevent children from accessing chat rooms and block access to Web sites and discussion groups based upon key words, subject matter, or content. In addition, a growing number of Internet Service Providers offer pre-filtered access for users. In addition to blocking pornography, these
filters screen for violent content, drug-related information and certain forms of hate speech.

There are also numerous user-based software applications that allow users to block access to certain Web sites. These programs are not a perfect solution; some applications screen too broadly, blocking valuable Web sites, while others fail to screen all inappropriate material. But user-based software applications are a far less restrictive alternative than COPA's criminal censorship of protected speech.\textsuperscript{287} Indeed, Congress recognized the usefulness of these alternatives when it enacted COPA and required that Internet Service Providers "notify [all new customers] that parental control protections (such as computer hardware, software or filtering services) are commercially available that may assist the customer in limiting access to material that is harmful to minors."\textsuperscript{288}

In addition to preserving parental control over minors' access to Web content, user-based programs are a far more effective means of achieving Congress' objective of restricting minors' access to "harmful" materials. User-based applications allow parents to shield minors from sexually oriented materials that originate abroad or from amateur or non-commercial sites, as well as from sites that require a credit card for payment. Had Congress allowed its Commission to study these alternatives prior to passing a content-based criminal statute, the Commission would likely have advised that a user-based

\textsuperscript{287} See Reno, 521 U.S. at 877; Denver Area, 518 U.S. at 758 (declaring that informational requirements and user-based blocking are more narrowly tailored than speaker-based schemes as a means of limiting minors' access to indecent materials). See also Fabulous Assocs., Inc. v. Pennsylvania Pub. Util. Comm'n, 896 F.2d 780, 787 (3d Cir. 1990) (concluding that pre-blocking of dial-a-porn calls was less restrictive means of protecting children than requirement that adults apply for access codes to receive such messages). In Fabulous Associates, the Third Circuit rejected the Commonwealth's argument that access codes were more effective than pre-blocking, since children could request unblocking and thereby gain access to sexually explicit messages. The court concluded that "[i]n this respect, the decision a parent must make is comparable to whether to keep sexually explicit books on the shelf or subscribe to adult magazines. No constitutional principle is implicated. The responsibility for making such choices is where our society has traditionally placed it — on the shoulders of the parent." Fabulous Assocs., 896 F.2d at 787.

\textsuperscript{288} COPA (to be codified at 47 U.S.C. § 230(d)). Of course, Congress is free to further its interests by educating the public about the benefits and dangers of the Internet and, more particularly, the Web. As the Supreme Court noted in Denver Area, "informational requirements" and user-based blocking are more narrowly tailored than speaker-based schemes as a means of limiting minors' access to offensive or harmful material. Denver Area, 518 U.S. at 757-58. Congress recognized the value of such educational efforts when it enacted the CDA. See Telecommunications Act of 1996, Pub. L. No. 104-104, § 552(1), 110 Stat. 142 (encouraging establishment of "technology fund" to support development of user-based blocking technology and public education).
solution is a preferable means of screening minors' access to inappropriate content on the Web.289

5. Vagueness Problems

While not likely to be a separate ground for invalidating the statute, courts will likely frown upon COPA for the additional reason that its terms create uncertainty for speakers faced with the prospect of a criminal prosecution.290 Like the CDA, COPA is vague in several significant respects.

First, COPA fails to define the relevant community that will set the standard for what is "harmful to minors" on the global Web. The community might be the local community that is viewing the speech or the community of adults communicating on the Web. If the standard is the former, how can a speaker who operates a Web site in New York predict what prosecutors in Alabama or Kansas might deem "harmful to minors?"291 Absent some guidance as to the relevant community, speakers will "steer far wider of the unlawful zone . . . than if the boundaries of the forbidden areas were clearly marked."292

Second, COPA fails to define the relevant age of the minor for purposes of determining whether material is "harmful to minors." It is not clear whether COPA prohibits material that lacks value for all minors, for some minors, or for some variation of the "average" or "reasonable" sixteen-year-old. It is unclear whether minors of a certain

289. The Pennsylvania district court concluded in its Memorandum enjoining enforcement of COPA that besides the fact that effective blocking software exists, there are other respects in which COPA is not the least restrictive means for achieving Congress's apparent objective of shielding children from on-line pornography. The court noted that the "sweeping category" of forms of content prohibited under COPA — including "any communication, picture, image, graphic image file, article, recording, writing, or other matter of any kind" — "could have been less restrictive of speech on the Web and more narrowly tailored to Congress's goal of shielding minors from pornographic teasers if the prohibited forms of content had included, for instance, only pictures, images, or graphic image files, which are typically employed by adult entertainment Web sites as 'teasers.'" Memorandum and Order of Reed, J., at 29 Reno (No. 98-5591) (on file with author). The district court also opined that Congress could have proceeded without imposition of "possibly excessive and serious criminal penalties" for communicating speech that is protected as to adults. See id.

290. The Reno Court pointed out that the vagueness of the CDA was "a matter of special concern for two reasons." Reno, 521 U.S. at 871. First, the statute was a content-based restriction on speech, which has an "obvious chilling effect on free speech." Id. at 872. Second, the CDA was a criminal statute. In addition to the "opprobrium and stigma of a criminal conviction," the CDA imposed severe fines on the prohibited communications. Id.; see Hynes v. Mayor of Oradell, 425 U.S. 610, 620 (1977) (stating that "[n]o one may be required at peril of life, liberty or property to speculate as to the meaning of penal statutes") (quoting Lanzetta v. New Jersey, 306 U.S. 451, 453 (1939)).

291. One of the judges on the district court panel in Reno would have held that the CDA was unconstitutionally vague because it did not define the relevant community for determining "indecency." See Reno, 929 F. Supp. at 863.

age can discern any "value," whether social, political, or literary, in certain materials. A speaker who attempts to satisfy COPA's "harmful to minors" standard may be assigned the hopelessly difficult task of determining whether its content contains "value" for an eight-year-old. Again, this uncertainty, coupled with the threat of criminal prosecution and substantial fines, will substantially restrict the speech that is made available on the Web.

Third, the definition of "harmful to minors" actually used in COPA is vague in at least one respect. The phrase "considered as a whole," which is part of the "serious value" prong of the Miller test, is nearly impossible to apply to online communications. As discussed in Part II, Web sites are comprised of thousands of linked documents, images, and texts, simultaneously presented through an ad-hoc linking process. COPA offers no guidance as to how a speaker is to treat or the government to define the "work as a whole" for purposes of the "harmful to minors" test.

Finally, COPA provides for enhanced penalties for "intentional" versus "knowing" violations, yet fails to define the distinction between the two types of violations.293 Nor is there any indication from Congress as to why the two distinct penalty provisions are necessary or desirable. It might be that an "intentional" violation entails active promotion of "harmful" materials to an audience of minors. In the absence of any clear definition, however, speakers cannot know how to avoid prosecution for "intentional" violations.

All of these additional concerns will cause courts to view COPA with skepticism. As the Reno Court determined, a content-based criminal speech restriction ought to present very clear guidelines for speakers who are faced with heavy penalties for non-compliance. COPA, like the CDA, fails to meet this requirement.

6. COPA's Effect On Users and the Medium

Even if technology allowed speakers to effectively use credit cards, debit cards or other methods to verify the age of users, such requirements would fundamentally alter the nature and values of the Web, which is characterized by spontaneous, instantaneous, albeit often unpredictable, communication by hundreds of thousands of individual speakers around the globe. Without the access barriers imposed by COPA, the Web provides an affordable and often seamless means of accessing an enormous and diverse body of information, ideas and viewpoints. While the Supreme Court has allowed reasonably narrow regulations of speech communicated over various media, it has never

293. See COPA (to be codified at 47 U.S.C. § 231(a)(1)-(2)).
upheld a speech restriction that fundamentally alters the very nature of the medium.

COPA would prevent or deter possibly hundreds of thousands of readers from accessing protected speech, even if it were feasible for speakers to set up a system to verify age. Readers who do not have the necessary identification would be denied access. Many adults do not have a credit card, and many foreign users are even less likely to have a credit card or other necessary identification. Further, many users will not want to provide personal information to obtain speech for free. In striking down the CDA, the Supreme Court noted that "[t]here is evidence suggesting that adult users, particularly casual Web browsers, would be discouraged from retrieving information that required use of a credit card or password."294 Users may not want to disclose their credit card numbers unless they are actually making a purchase.

In addition, COPA's registration requirement would prevent users from accessing information anonymously, and would thus deter many users from accessing sensitive or controversial speech covered by COPA.295 The Supreme Court recently invalidated a similar "registration" requirement as applied to cable viewers. In Denver Area Educations Telecommunications Consortium v. FCC,296 the Supreme Court struck down a statutory requirement that viewers provide written notice to cable operators if they want access to certain sexually oriented programs, because the requirement "restrict[s] viewing by subscribers who fear for their reputations should the operator, inadvertently or inadvertently, disclose the list of those who wish to watch the . . . channel."297 Requiring that Web speakers register their users by credit card or adult identification on pain of felony conviction and onerous civil fines is a more onerous burden than the scheme held unconstitutional in Denver Area.298

294. Reno, 521 U.S. at 857 n.23.
295. See McIntyre v. Ohio Elections Comm'n, 514 U.S. 334, 356-57 (1995) (invalidating Ohio statute prohibiting anonymous distribution of campaign literature); see also Lamont v. Postmaster Gen., 381 U.S. 301, 307 (1965) (invalidating requirement that recipients of communist literature notify post office that they wish to receive such materials). McIntyre establishes a limited protection for anonymous speech. The Court was explicit that the opinion reached "only written communications and, particularly, leaflets of the kind Mrs. McIntyre distributed." McIntyre, 514 U.S. at 338 n.3. The case does not, therefore, settle the right of the government to regulate anonymity.
298. See Fabulous Assocs. v. Penn. Pub. Util. Comm'n, 896 F.2d 780, 785 (3d Cir. 1990) (holding that the First Amendment "protects against governmental 'inhibition as well as prohibition.' An identification requirement exerts an inhibitory effect and such deterrence raises First Amendment issues comparable to those raised by direct state imposed burdens or restrictions.") (quoting Lamont v. Postmaster Gen., 381 U.S. 60, 64-65 (1965) (Brennan, J., concurring)).
Congress's objective of protecting children from materials deemed "harmful" to their physical and psychological well-being is certainly compelling. However, the First Amendment states that "Congress shall make no law . . . abridging the freedom of speech." Despite good intentions, COPA abridges a substantial amount of protected speech provided on the Internet for free. The statute must therefore be invalidated. Indeed, as the district court recently noted in enjoining enforcement of COPA, "perhaps we do the minors of this country harm if First Amendment protections, which they will with age inherit fully, are chipped away in the name of their protection." 299

V. SOLVING THE INTRACTABLE PORNOGRAPHY DILEMMA

Congress, confronted with the Internet's intractable pornography problem, has three options. First, it might refine COPA in order to more narrowly prohibit the speech it apparently finds objectionable — "teasers," or pornographic images provided for free on Web sites that sell pornography for profit. Second, Congress could wait for the state of the art, specifically computer code that establishes geography and identity, to advance to the point where cyberzoning meets the requirements of real space law. Finally, Congress could choose to do nothing, relying instead upon market-based solutions, such as user-based blocking software to zone Internet pornography. I shall discuss these options in turn. While I fear that Congress, for political reasons, will focus on the first, I believe that the Internet and its users would be better served by Congressional restraint.

A. A MORE NARROWLY TAILORED ALTERNATIVE TO COPA

Assuming that Congress's primary purpose in enacting COPA was to shield children from the pornographic "teasers" placed on Web sites to lure visitors inside, 300 a statute narrowly tailored to serve that purpose can readily be drafted. Three changes ought to be made to COPA in order to satisfy the mandates of the First Amendment.

First, Congress should narrow the categories of speech that fall within the statute. COPA prohibits "[a]ny communication, picture,

300. This, indeed, would appear to have been Congress's intent. COPA does not apply to Web publishers who make pornographic images available for free to all who visit the site. Only those who include such materials on their sites "as a regular course of trade or business" are subject to COPA's penalties. As the House Committee on Commerce noted in its report, "even though some Web sites contain warnings that the material on that Web site is adult-oriented, most provide no warnings, or if they do provide a warning, there is sexually explicit material on the same page as the warning." H.R. Rep. No. 105-775, at 20-21 (1998).
image, graphic image file, article, recording, writing, or other matter of any kind" that is obscene or "harmful to minors."\textsuperscript{301} A far less restrictive statute would prohibit only "harmful" pictures, images, or graphic image files, which are typically employed by commercial pornographers as "teasers" on their sites. Limiting the regulated forms of content to pictures and the like would eliminate from the threat of prosecution a vast array of Internet content providers who provide frank discussions and written educational materials on such topics as safer sex and abortion.

Second, Congress should alter the "value" prong of the \textit{Miller} test in various respects. It should exempt from coverage any image or graphic image file that, \textit{standing alone}, has serious artistic, \textit{educational}, \textit{medical} or \textit{scientific} value for \textit{any} minor. Three distinct changes to COPA are contemplated here. COPA, incorporating a modified \textit{Miller} test, subjects a publisher to prosecution for making available on a Web site any "communication," etc., that "taken as a whole, lacks serious literary, artistic, political, or scientific value for minors."\textsuperscript{302} The first proposed alteration is to require that each image or graphic image file be judged on its own merits, and not "taken as a whole." The "taken as a whole" formulation is unworkable in cyber-space, as it is difficult to define what the "whole" consists of on a Web site that contains numerous links to other sites and is divided into many files of its own. "Teasers," or whatever other images prosecutors believe fall within the strictures of the statute, should stand or fall based upon a viewing conducted in isolation. The second proposed alteration is to add both an "educational" and "medical" component to the values listed in \textit{Miller} and COPA. Pictures of condoms, for example, and instructions concerning how to use them, may have no "artistic" or "scientific" value for minors, but undoubtedly have an educational or medical value that is potentially life-saving. The third alteration I propose to the "value" component of the \textit{Miller} test is to exempt any image or picture that has value as to \textit{any} minor. COPA does not distinguish between minors who are very young and those on the cusp of adulthood. Thus, an image that may have some artistic or other value for a sixteen-year-old is still prohibited, as it may have no such value at all from the perspective of a very young minor. The proposed alteration would protect the constitutional rights of older minors to view materials that may be deemed "harmful" to their much younger counterparts.

Finally, Congress should abandon the criminalization paradigm of the CDA and COPA. Congress's goals could be served without im-

\textsuperscript{301} See COPA (to be codified at 47 U.S.C. § 231(e)(6)).
\textsuperscript{302} See id. (to be codified at 47 U.S.C. § 231(e)(6)(C)).
position of excessive criminal penalties for communication of speech that is protected as to adults. Violations of zoning laws in real space result in civil penalties. There is no reason, save politics, to deviate from this approach in cyberspace.

I believe that the proposed alterations would save COPA from invalidation under the First Amendment. The proposed statute would serve Congress's goals of protecting children from pornographic images made available for free on commercial pornography sites, while protecting the rights of minors, particularly older minors, to receive images that have educational, artistic, or scientific value.

B. FROM BORDERS TO BOUNDARIES

Of course, the fact that Congress could enact a speech-restrictive statute that passes First Amendment scrutiny does not mean that it ought to do so. At least, it does not mean that Congress ought to do so now. Zoning is anathema to cyberspace. The near anarchy of the Internet provides no means for putting people or speech in their proper place. Indeed, they have no "proper place" there. The architecture of cyberspace allows everyone to move freely and to consume information without boundaries or walls.

In the absence of natural boundaries, however, Congress has stepped in to regulate the anarchy — to attempt to graft onto cyberspace the concepts of geography and identity, or what Professor Lessig has called "the architecture of real space."303 There are many who prefer the Net as it is now, a world in which information flows freely across borders, but cannot be stopped by boundaries or walls. But make no mistake — zoning is coming to cyberspace. As Professor Lessig, who laments the trend, has noted, "the Web is becoming a place where the discriminations of real space get automated in a technology of zoning."304 The technology of zoning promises to be far more precise than any analog that exists in real space. In contrast to legislative code, computer code will someday infallibly discriminate in the distribution of, and access to, pornography and other information on the Internet.305

304. Lessig, 45 EMORY L.J. at 889.
305. Professor Lessig has noted that the trend toward perfect zoning is occurring on the Internet without governmental intervention:

Quite without governmental mandate, and indeed, without anything like a centralized process of decision, cyberspace is already becoming something quite different from what I have described. It is moving, that is, from a relatively unzoned place to a universe that is extraordinarily well zoned. The architecture of cyberspace — the software that constitutes it — is becoming quite
More succinctly put: "Law as code is a start to the perfect technology of justice." 306

Unlike Professor Lessig and others, I am not troubled by the introduction of zoning into cyberspace. Indeed, it is difficult to imagine the anarchy that presently characterizes the Internet continuing in perpetuity, particularly if the Internet is to become a democratic forum for the dissemination of information and a major vehicle for commerce. Governments patrol borders as an attribute of their sovereignty, both to apprehend violators of the law and to control the effects of materials that cross borders. 307 They cannot serve these compelling interests without some means of exerting "physical" control over their subjects. The best means for doing so, whether in real space or cyberspace, is to create and regulate effective boundaries and walls.

As of yet, there are no definitive boundaries in cyberspace. Like much else in cyberspace, the borders that exist are rather permeable and rudimentary. The Internet's borders are largely the result of custom, and they have not yet hardened into boundaries or walls. Cyberspace customs are likely to change, however, and to do so with some frequency and rapidity. In other words, the Net's architecture is unsettled.

Nevertheless, just as cyberspace is taking shape, Congress has stepped in with the CDA and COPA, two zoning laws through which lawmakers sought to transport real space zoning principles to cyberspace. The difficulty with Congress's approach to the Internet's pornography dilemma to this point has been the prematurity of its regulation. More fundamentally, it has been Congress's inability to grasp just what it is regulating, and how technology — that other "code" about which Professor Lessig has written so eloquently — limits its power to regulate cyberspace within the bounds of the First Amendment.

This does not mean that Congress is forever foreclosed from regulating, or zoning, speech outside real space. As zoning comes to cyberspace, boundaries and walls will develop and Congress, along with the states, will undoubtedly step in to exert some measure of control over the materials crossing those boundaries. As Justice O'Connor noted in her concurring opinion in Reno, one of the distinguishing features of

quickly far better at facilitating discriminations in access and distribution than any equivalent technologies in real space.

Id. at 888.


the Internet is the malleability of its architecture. She stated: "Cyberspace is malleable. Thus, it is possible to construct barriers in cyberspace and use them to screen for identity, making cyberspace more like the physical world and, consequently, more amenable to zoning laws." Boundaries and walls can be constructed, torn down, re-configured and relocated with a few changes in the regulating computer software. Formal and informal zones operate effectively in real space, because features like geography and identity are found there. These features, as their description in Part II demonstrates, are not found in cyberspace — they are made. They have not been made yet, at least not to an extent that renders them susceptible to speech restrictions like the CDA and COPA. It is as if the government were framing the portrait when the world was still painting the object to be framed.

Thus far, Congress has proceeded hastily in this rapidly developing and highly uncertain environment. Lawmakers have enough difficulty criminalizing speech in the settled architecture of the real world. Congress raises the stakes significantly by forcing publishers in cyberspace to self-censor or suffer lengthy jail terms and heavy fines. This is, fortunately, not the only course available. Indeed, if it is willing to exercise some patience, Congress will find that it need not legislate this type of broad, draconian zoning in order to be a meaningful participant in shaping the architecture of the Internet.

The first thing Congress ought to do before it takes up another Internet censorship law is to become educated as to what it is regulating and the options available to it. Hopefully, the Commission Congress created when it passed COPA will thoroughly investigate the Internet's existing architecture and recommend plausible means for protecting children from "harmful" materials that are far less restrictive than COPA. It is unfortunate that the Commission was granted only one year to conduct its study and report its findings to Congress. As CDA and COPA demonstrate, the technological landscape may not change appreciably during the next year. Advances in user-based blocking software, rating systems, gateway technology, and domain name structure, to name only a few of the rapidly developing areas, are likely to require more incubation time to become effective alternatives to the censorship path Congress has charted thus far.

Like zoning in general, however, these changes are coming to the Internet. It will be technological advances, not Congressional mandates, that will finally solve the Internet's intractable pornography problem. Or, at least, it will be some cooperative effort between engineers and lawmakers that allows Congress to regulate speech on the Internet within the bounds of the First Amendment. Congress' pri-

308. See Reno, 521 U.S. at 890 (O'Connor, J., concurring in part, dissenting in part).
mary goal in COPA and the CDA was to mandate that Web publishers discriminate in the access to pornography on the basis of user age. As indicated in Part II, advances on two separate fronts hold out great promise that the identity now missing from the Internet is forthcoming. Rating systems, like the PICS system,\textsuperscript{309} are already being used by many publishers of Internet pornography. Similarly, domain name proposals have been made that would establish a top-level domain for pornographic materials. What is needed is the development of a consensus as to what ratings or domain name ought to be used, and what materials ought to fall within the rated categories or domain. PICS may well, in due time, provide that consensus as to ratings. In conjunction with the move to ratings and perhaps additional domains, engineers continue to perfect user-based blocking software that will permit parents to block rated or domain-specific cybersmut with far greater precision than Congress could ever hope to obtain through legislation.

Of course, Congress cannot mandate that users purchase and install blocking software that will discriminate along the lines of an accepted rating system or domain name. But assuming some consensus can be reached, Congress could encourage sites to rate their content or place it within the chosen domain by punishing those who do not do so. It might even, at some point, establish a ratings Commission, along the lines of an FCC, to help forge some consensus as to the proper ratings to use in cyberspace. In other words, Congress can require that publishers zone their own materials in order to deny minors access to pornography on the Internet. This solution would resemble the much-debated "V-chip" for television. While it would raise complexities of its own, including the need to determine what content belongs where, the ratings and domain name solution would not be constitutionally suspect.

C. PARENTAL ZONING

There is another solution, however, that is even more attractive. If one accepts, as I do, that parents should determine in the first instance what their children see on their home computer screen, then user-based blocking software will provide the "perfect technology of justice" of which Lessig writes. The software as it now exists allows parents to block all manner of pornography, whether in the form of images, words, or video, from their home computers. It is true that this code sometimes screens too broadly for words like "breast," but that seems a small price to pay in order to block the array of porno-

\textsuperscript{309} See supra note 104.
graphic images and text that children may encounter, whether intentionally or by chance, on the Internet.

Blocking software is as easy to install as using an ATM card, and is extremely difficult to disengage. Thus, unlike, say, credit card verification, it is a solution that children cannot easily end-run. In addition, user-based blocking software will be far more effective than legislative fiat in another respect: it will enable parents to block materials that are posted on overseas sites. Further, unlike COPA, user-based blocking software blocks materials from non-profit as well as commercial sites.

I have some sympathy for the argument that it is the pornographers, not the parents, who ought to pay for the zoning of pornography. But the price to be paid under statutes like the CDA and COPA, including the debasement of the First Amendment and the loss of the fluidity that makes the Internet a unique and exciting form of communication, seems far greater than the modest sum concerned parents must expend to zone pornography from the desktop.

VI. CONCLUSION

For all its focus on the Reno decision, Congress missed the Supreme Court's primary admonition that the legislature, rather than return to the drafting table after the failure of the CDA, should exhibit patience and allow the Internet's nascent technology to develop prior to embarking on yet another attempt at Internet speech regulation. In COPA, Congress did manage to improve upon the defects that doomed the CDA. But the improvements failed to address the principle barrier to content-based regulation of speech on the Internet. As yet, the characteristics of geography and identity that make possible the zoning of speech in real space do not exist in cyberspace. Until the technological state-of-the-art in cyberspace advances to meet the state of real space First Amendment law, Congress's attempts to zone speech in cyberspace will falter.

The most Congress can expect to accomplish in the current environment is passage of a narrowly drawn law that will place pornographic "teasers" beyond the reach of most children. As the Justice Department pointed out before COPA was enacted, however, law enforcement resources are finite, and several statutes already prohibit the communication of the most harmful materials to children. Under the circumstances, Congress ought to practice the restraint urged upon it by the Reno Court. Nothing Congress has done, or is likely to do, can come close to matching the precision and effectiveness of the
market solutions, such as user-based blocking software, being developed by engineers. When such projects reach fruition, we shall see that the pornography problem on the Internet is not “intractable” after all.