Legislators have long sought to protect children from exposure to sexually explicit materials. With the proliferation of such materials on the Internet, Congress has perceived a growing threat in the ease with which minors can access these materials. However, the Internet has altered the landscape in more ways than just by making sexually explicit materials more prevalent and more easily accessible to children. Internet technologies also constrain and shape the approaches Congress is able to take in addressing the problem. Even as the legislature enacts laws and courts interpret them, the landscape continues to change—consumers of web services become more sophisticated, software providers become more aware of and responsive to consumer needs, and through it all, the technological features of the Internet are constantly evolving.

Congress, the courts, and commentators have contemplated various ways to address the problem of children’s access to sexually explicit materials on the Internet, spanning the spectrum from pure technological solutions to pure legislative regulatory regimes. In Ashcroft v. ACLU, the Supreme Court assessed Congress’s most recent legislation in this arena, the Child Online Protection Act (COPA). The Court upheld a preliminary injunction against COPA’s enforcement, finding the ACLU likely to prevail on its claims of unconstitutionality. In doing so, the Court indicated the legal boundaries within which Congress must work. Taking into account the changing landscape, a landscape defined by both technology and law, Congress might be able to devise a new form of legislation to curtail children’s access to sexually explicit materials online that would be validated by the courts. But given the constraints imposed by the Constitution,
the practical limits of various institutional bodies, and the dynamic state of
the technology surrounding the Internet, Congress would be well advised
to explore the full range of options, some of which involve little or no
congressional action. A desirable scheme is detailed in the Final Report of
the Commission on Child Online Protection ("COPA Commission" or
"the Commission"), a congressionally appointed panel whose mission was
to "identify technological or other methods that will help reduce access by
minors to material that is harmful to minors on the Internet." The Com-
mission’s recommendations advocate an appropriately hands-off approach
that takes advantage of myriad possible technological solutions in address-
ing Congress’s concerns.5

Part I of this Note describes background principles of First Amend-
ment law which illuminate the discussion at hand. It also details the pas-
sage and subsequent invalidation of COPA’s predecessor, the Communi-
cations Decency Act (CDA). Part II discusses Ashcroft v. ACLU in the
framework of First Amendment law and the Internet. Part III analyzes the
reasons for COPA’s unconstitutionality and explores what options remain
for action by Congress. The part concludes that the best balance is
achieved in the COPA Commission’s recommendations for a technologi-
cally based solution blending voluntary and encouraged activities with op-
tions for affirmative acts on the part of governmental bodies.

I. BACKGROUND

A. First Amendment Law: Obscenity, Pornography, and Media

Sexually explicit speech has long been a desired target of government
regulation. The First Amendment, however, places limits on such regula-
tions.6 Courts generally apply strict scrutiny to content-based restrictions
on the freedom of expression, and such restrictions are permissible only if:
(1) the government demonstrates that the regulation is in furtherance of a
compelling state interest, and (2) the government demonstrates that the
chosen method is the least restrictive means of achieving its stated goal.7
However, there are some categories of speech, such as obscenity, that re-
ceive no protection whatsoever under the First Amendment. Particularly
salient here are three issues: the Supreme Court’s definition of unprotected

5. COMMISSION ON CHILD ONLINE PROTECTION (COPA), REPORT TO CONGRESS
6. U.S. CONST. amend. I ("Congress shall make no law . . . abridging the freedom
of speech . . . ").
obscene speech; cases in which the court has permitted the regulation of sexually explicit, but non-obscene, speech; and the medium-specific approach sometimes used by the Court in addressing First Amendment challenges.

In *Miller v. California*, the Supreme Court articulated the current operating definition of obscenity.\(^8\) Under the *Miller* standard, the following three factors determine whether speech is obscene:

(a) whether the average person, applying contemporary community standards, would find that the work, taken as a whole, appeals to the prurient interest;
(b) whether the work depicts or describes, in a patently offensive way, sexual conduct specifically defined by the applicable state law; and
(c) whether the work, taken as a whole, lacks serious literary, artistic, political, or scientific value.\(^9\)

Obscene speech, so defined, is categorically outside the protection of the First Amendment.\(^10\) However, the government may not use its authority to regulate obscenity in a way that overly burdens speech that is not obscene.\(^11\)

The Court has also addressed the regulation of sexually explicit material that does not satisfy the *Miller* obscenity standard. Such regulations have traditionally been upheld where they are aimed at protecting minors from exposure to pornography and other sexually explicit speech. For example, *Ginsberg v. New York* presented a challenge to a state statute prohibiting selling to a minor (under the age of 17) materials that were obscene as to minors (not to adults, as in the *Miller* standard).\(^12\) The Court held that minors' constitutional right to see or read material is narrower than that of adults and thus the government may proscribe the distribution to children of that which it may not withhold from adults.\(^13\) This solution was justified, the Court reasoned, by the parents' interest in directing the rearing of their children and by the State's independent interest in the

---

9. *Id.* (internal quotation marks and citations omitted).
10. See, e.g., *id.* at 23.
11. See, e.g., *Smith v. California*, 361 U.S. 147, 152 (stating that Supreme Court precedent "does not recognize any state power to restrict the dissemination of books which are not obscene"); *see also Nitke v. Ashcroft*, 253 F. Supp. 2d 587, 599 (S.D.N.Y. 2003) (holding that government may not restrict obscenity by methods that "chill[] an excessive amount of explicit but non-obscene speech").
13. *Id.* at 636.
well-being of its youth. Similarly, in *FCC v. Pacifica Foundation*, the Court permitted regulation of sexually explicit but non-obscene broadcast material, in large part because the broadcast media are "uniquely accessible to children, even those too young to read." In several First Amendment cases, the Supreme Court has used a medium-specific approach to the analysis of the rights and interests at stake. This approach recognizes that "[e]ach method [of expression] tends to present its own peculiar problems." In *Pacifica*, the Court noted that broadcasting, as a medium, has traditionally received the most limited First Amendment protection, for three primary reasons, related to the technological characteristics of the medium itself. First, the scarcity of the broadcast spectrum requires that those allowed to make use of this resource do so in a way that serves the public interest. Second, the practicalities of a continuous broadcast make prior warnings about forthcoming content ineffective, thus increasing the invasive nature of a potentially offensive broadcast. Third, broadcasting is uniquely accessible to children. Thus, sanctions against a radio broadcaster for a broadcast that was not obscene did not violate the First Amendment. Similarly, in *United States v. Playboy Entertainment Group*, the Court took special notice of the characteristics of the medium of cable television in order to "inform [the] assessment of the interests at stake." Interestingly, the Court pointed out that the nature of a particular medium can justify restrictions that might be unacceptable when applied to other media, but in this case, the medium-specific approach led it to strike down restrictions similar to those approved in other contexts. The Court distinguished *Pacifica*, and found dispositive a crucial technological difference between cable television and broadcasting—the ability to block specific

---

14. *Id.* at 639-40.
15. 438 U.S. 726, 749 (1978). The broadcast at issue was a twelve-minute monologue entitled “Filthy Words,” performed by comedian George Carlin, which listed and repeated “the words you couldn’t say on the public...airwaves...” *Id.* at 729.
16. Joseph Burstyn, Inc. v. Wilson, 343 U.S. 495, 503 (1952); see also Pacifica, 438 U.S. at 748.
17. Pacifica, 438 U.S. at 748-50.
18. *Id.* at 748.
19. *Id.* at 748-49.
20. *Id.* at 749-50.
22. *Id.* at 815 (finding that the “capacity of cable televisions to block unwanted channels on a household-by-household basis” was a key distinction between the cable and broadcast media, making restrictions imposed on broadcast media inappropriate for cable).
programs at the request of the user. More specifically, this feature of cable television made possible a plausible, less restrictive alternative to the regulation at issue, which required cable operators to fully scramble channels displaying adult content or limit the display of such content to certain hours.

Finally, in *Reno v. ACLU*, the Supreme Court applied this medium-specific approach to the Internet, in the course of its analysis of the Communications Decency Act of 1996.

**B. The Communications Decency Act and Reno v. ACLU**

COPA was Congress’s second attempt to limit children’s access to harmful materials on the Internet. The first was the Communications Decency Act of 1996 (CDA), which resembled COPA in many respects and which was invalidated by the Supreme Court on First Amendment grounds. The Court’s decision invalidating the CDA both served as a model for COPA and foreshadowed its eventual demise.

In February 1996, President Bill Clinton signed into law the Telecommunications Act of 1996, which included Title V, the CDA. All provisions of the CDA were added in committee or offered as amendments during floor debate—no hearings were held. Immediately after the President signed the bill, plaintiffs challenged the constitutionality of two provisions of the CDA. The first challenged provision prohibited the “knowing transmission of obscene or indecent messages to any recipient under 18 years of age.” The second provision prohibited the “knowing sending or displaying of patently offensive messages in a manner that is available to a person that is under 18 years of age.”

A three-judge panel of the district court entered a preliminary injunction against both challenged provisions. One judge even went so far as to state that “the First Amendment denies Congress the power to regulate protected speech on the Internet,” reasoning that the Court’s prior cases required a medium-specific approach to regulation of mass communica-

23. Id.
24. Id. at 806, 815.
25. See infra Part I.B.
28. Id. at 858, n.24.
29. Id. at 861-62.
30. Id. at 859 (quoting 47 U.S.C. § 223(a)(1)(B)(ii)).
31. Id. (quoting 47 U.S.C. § 223(d)).
32. Id. at 862.
tion, and the Internet as a medium is entitled to "the highest possible protection from government intrusion."33

On appeal, the Supreme Court analyzed the particular qualities of the Internet as a medium, and held that applying a high level of scrutiny was appropriate.34 Unlike broadcasting, the Court reasoned, the Internet was not a "'scarce' expressive commodity," and thus there was no reason, as there was in Pacifica, for qualifying the level of scrutiny applied.35 Additionally, the Court noted the absence of a tradition of government supervision over the Internet, and the fact that the medium was not as invasive or subject to accidental exposure to unwanted material as is broadcast.36

The Court then determined that the "ambiguities concerning the scope of [the CDA's] coverage render it problematic for purposes of the First Amendment."37 The ambiguities in the statute's language, which went beyond the inherent "vagueness" of the Miller obscenity standard, would provoke uncertainty among speakers and a chilling effect would be exacerbated by the criminal penalties imposed.38 These ambiguities undermined the claim that the statute was narrowly drawn to further the government interest in protecting children from harm.39

The potential burdens on adult speech were not justified because "less restrictive alternatives would be at least as effective in achieving the legitimate purposes the statute was enacted to serve."40 The Court first rejected the proposition that it must accept and defer to Congress's judgment that nothing less than a total ban would be effective in achieving the government's objectives.41 The Court then held that the CDA placed too heavy a burden on lawful adult speech,42 and that its provisions were overbroad.43 The Court found that "[g]iven the size of the potential audience for most messages, in the absence of a viable age verification process, the sender must be charged with knowing that one or more minors will likely view it."44 Thus, the burden on adult speech was great, espe-

34. Reno, 521 U.S. at 872-73.
35. Id. at 870.
36. Id. at 868-69.
37. Id. at 870.
38. Id. at 871-73.
39. Id.
40. Id. at 874.
41. Id. at 875.
42. Id. at 876.
43. Id. at 879.
44. Id. at 876.
cially in light of the district court's finding that at the time of trial, existing technology did not allow for the effective screening of minors without denying access to many adults as well.\footnote{Id.}

The Court also listed several overbroad aspects of the CDA. First, the scope of the CDA was not limited to commercial speech or commercial entities.\footnote{Id. at 877.} Second, the terms "indecent" and "patently offensive" would cover "large amounts of nonpornographic material with serious educational or other value."\footnote{Id.} Third, the "community standards" criterion in the context of communications over the Internet would mean that any communication would be judged by the "standards of the community most likely to be offended by the message."\footnote{Id. at 877-78.} The incredible breadth of the statute imposed an especially heavy burden on the government to explain why a less restrictive "provision" would not be as effective as the CDA.\footnote{Id. at 879.}

The Court then cited several possible alternatives to the CDA, and found that the government had failed to show (in hearings, findings, etc.) why these alternatives would be unacceptable.\footnote{Id.} These alternatives were as follows: (1) "requiring that indecent material be ‘tagged’ in a way that facilitates parental control of material coming into their homes"; (2) "making exceptions for messages with artistic or educational value"; (3) "providing some tolerance for parental choice"; and (4) "regulating some portions of the Internet—such as commercial Web sites—differently from others, such as chat rooms."\footnote{Id.} The Court also found that "currently available user-based software suggests that a reasonably effective method by which parents can prevent their children from accessing...material which parents may believe is inappropriate for their children will soon be widely available."\footnote{Id. at 877.}

\section*{C. The Child Online Protection Act}

After failing in its first attempt at protecting children from sexually explicit materials online, Congress passed the Child Online Protection Act (COPA), which was intended to go into effect on November 29, 1998.\footnote{Pub. L. No. 105-277, 112 Stat. 2681-736 (1998) (codified at 47 U.S.C. § 231 (2000)).} COPA imposes criminal liability, up to a $50,000 fine and six months in
prison, and civil liability, up to $50,000 in damages, for the knowing or intentional posting online of content that is "harmful to minors" for "commercial purposes."\footnote{47 U.S.C. § 231(a)(1) (2000).} Content that is "harmful to minors" is defined as:

\begin{quote}
[A]ny . . . 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.\footnote{Id. § 231(e)(6).}
\end{quote}

The statute also defines "minors," "commercial purposes," and other key terms.\footnote{Id. § 231(e).} Furthermore, the statute criminalizes all transmissions within these definitions, but provides an affirmative defense for a provider that "in good faith, has restricted access by minors to material that is harmful to minors" through age verification or "any other reasonable measures that are feasible under available technology."\footnote{Id. § 231(c)(1).}

Congress crafted COPA significantly more carefully than the CDA, but devoted only marginally more congressional time to its consideration. Responding to the Court's comments in \textit{Reno} about the lack of thorough consideration of the CDA, Congress held two hearings on the harmful nature of exposing children to indecent, sexually explicit materials.\footnote{Timothy Zick, \textit{Congress, the Internet, and the Intractable Pornography Problem: The Child Online Protection Act of 1998}, 32 CREIGHTON L. REV. 1147, 1173 (1999).}

\footnotesize
\begin{enumerate}
\item \footnote{Id. § 231(e)(7).} "A person shall be considered to make a communication for commercial purposes only if such person is engaged in the business of making such communications." \textit{Id.} § 231(e)(2)(A). One is engaged in the business of making such communications if they are "a regular course of such person's trade or business, with the objective of earning a profit as a result of such activities." \textit{Id.} § 231(e)(2)(B).
\item \footnote{Id. § 231(c)(1).}
\end{enumerate}
II. ASHCROFT V. ACLU

A. Procedural History

On October 22, 1998, various Internet content providers, such as Powell's Bookstore and Salon Internet, Inc., and civil liberties groups, such as the Electronic Frontier Foundation, the Electronic Privacy Information Center, and the American Civil Liberties Union (ACLU), brought suit to enjoin the enforcement of COPA.59 The district court granted a preliminary injunction, concluding that the government had not met its “burden to prove that COPA is the least restrictive means available to achieve the goal of restricting the access of minors to [sexually explicit] material.”60 On appeal, the Third Circuit affirmed the preliminary injunction on a different ground, holding that the “community standards” language in COPA rendered the statute unconstitutionally overbroad.61 The Supreme Court granted certiorari and reversed, holding that the community standards language did not alone render the statute overbroad, and remanded to the Third Circuit to reconsider the district court’s granting of the preliminary injunction.62

On remand, the Third Circuit again affirmed, concluding that “the statute was not narrowly tailored to serve a compelling Government interest, was overbroad, and was not the least restrictive means available” to serve the goal of preventing minors from accessing harmful materials online.63 The Supreme Court again granted certiorari to determine whether enforcement of COPA was properly enjoined because the statute “likely violates the First Amendment.”64

B. The Supreme Court’s Decision

In Ashcroft v. ACLU, the Supreme Court held that the district court did not abuse its discretion in granting a preliminary injunction against COPA.65 The Court affirmed on the ground that the government had failed, in the district court, to rebut the plaintiffs’ contention that there were plausible less restrictive alternatives which would be at least as ef-

60. Id. at 497-98.
61. ACLU v. Reno, 217 F.3d 162 (3d Cir. 2000).
63. ACLU v. Ashcroft, 322 F.3d 240 (3d Cir. 2003).
65. Id. at 2788-89.
The Court remanded the case to the district court for a full trial on the merits. The Court's reasoning largely mirrored that of the district court. The district court focused on the existence of plausible less restrictive alternatives to COPA, and determined that the plaintiffs were likely to prevail on this issue. The Court set out the relevant rule for considering content-based restrictions on speech:

A statute that effectively suppresses a large amount of speech that adults have a constitutional right to receive and to address to one another... is unacceptable if less restrictive alternatives would be at least as effective in achieving the legitimate purpose that the statute was enacted to serve.

Furthermore, once a complainant challenges a content-based restriction and points out alternatives, the burden is on the government to prove that the proposed alternatives will be less effective than the target of the challenge. The Court found that the district court's granting of the preliminary injunction under these rules was not an abuse of discretion, because the factual record evidenced a number of plausible less restrictive alternatives to the statute, the effectiveness of which the government had failed to disprove.

The Court focused primarily on blocking and filtering software as a plausible less restrictive alternative to COPA, because this was the main option considered by the district court. The Court undertook a detailed description and exploration of the characteristics of filtering software, comparing its effectiveness at restricting "harmful" speech to that of the authentication and age verification requirements imposed by COPA. The Court stated that filters were less restrictive than the provisions of COPA because they imposed only selective speech restrictions at the "receiving end" as opposed to "universal restrictions at the source." This technology would allow adults, both with and without children, to access speech to which they were constitutionally entitled. The chilling effect would be diminished, and no speech labeled as criminal. The Court even proposed that filters might be more effective than COPA, at least in part because

66. Id.
67. Id.
68. Id. at 2791 (quoting Reno v. ACLU, 521 U.S. 844, 874 (1997)) (internal quotation marks omitted).
69. Id. at 2791-92.
70. Id. at 2792.
71. Id.
72. Id.
they would prevent minors from accessing harmful content that COPA cannot reach, such as material that comes from outside the United States. The Court acknowledged that filtering software was not a perfect solution to the problem of children accessing harmful material online, but this point was not sufficient to defeat the granting of the preliminary injunction. The Court found that the government had only pointed out some flaws in the filtering software, and had not met its burden to show that this alternative was less effective overall.\textsuperscript{73}

The government raised the objection that filtering software should not be considered a viable alternative because Congress could not require its use.\textsuperscript{74} However, the Court found that if an alternative accomplished the same objectives, it could be considered regardless of whether or not Congress could mandate its use.\textsuperscript{75} The Court pointed out that even without a mandate, by encouraging use of filtering software in schools and libraries (via the Children’s Internet Protection Act)\textsuperscript{76} and encouraging parents to use such software, Congress could achieve the same objective of preventing children from accessing harmful material.\textsuperscript{77} The Court described the issues before it in this case and in \textit{Playboy}\textsuperscript{78} as presenting a “choice ... between a blanket speech restriction and a more specific technological solution that was available to parents who chose to implement it.”\textsuperscript{79}

Finally, the Court offered some “practical reasons” why the preliminary injunction should stand pending a full trial.\textsuperscript{80} The most interesting of these was the assertion that “the factual record does not reflect current technological reality.”\textsuperscript{81} In other words, this case had been shifting between courts for so many years, since the suit was first filed in 1998. Because technology changes so quickly, the evidence introduced at the preliminary injunction stage had become all but irrelevant, and there may have been technological developments important to the First Amendment analysis that a court should be able to consider. Such a proposition presents interesting possibilities and considerations for many modern cases involving quickly changing technology.

\begin{itemize}
\item \textsuperscript{73} \textit{Id.} at 2793.
\item \textsuperscript{74} \textit{Id.}
\item \textsuperscript{75} \textit{Id.}
\item \textsuperscript{76} \textit{See infra} note 131 and accompanying text.
\item \textsuperscript{77} \textit{Ashcroft}, 124 S. Ct. at 2793.
\item \textsuperscript{78} \textit{See supra} notes 21-24 and accompanying text.
\item \textsuperscript{79} \textit{Ashcroft}, 124 S. Ct. at 2794.
\item \textsuperscript{80} \textit{Id.}
\item \textsuperscript{81} \textit{Id.}
\end{itemize}
III. ANALYSIS

The government is constrained in its attempts to curtail children's access to sexually explicit materials on the Internet by both the legal circumscriptions and the technological space. The legal circumscriptions are drawn by general First Amendment doctrine and more specific cases regarding regulation of the Internet and of other media. The technological space is defined by the technical and customary aspects of the way the Internet functions. If Congress wishes to address the legitimate governmental purpose of protecting children from harmful sexually explicit content on the Internet, it must operate within these constraints. If Congress decides to rework the legislative approach, it will be held to a strict standard by the courts. On the other hand, if Congress abandons the search for a solution to this problem, constituents may not be pleased, and there may be no naturally developing solution. In devising a solution, Congress must be aware not only of these constraints, but of potential effects on the behavior of Internet users and content providers, and on these individuals' First Amendment freedoms.

Any attempted solution that does not take into account and leverage the power of existing and emerging technologies is not only likely to be invalidated by the courts, as in Ashcroft and Playboy, but is also likely to be ineffective. The best solution to this dilemma is a governmental scheme that avoids broadly applicable statutory restrictions, encourages the naturally developing use of technological solutions to the problem, and gives a large measure of control to local bodies and parents to choose which restrictions to impose on their children. For a guide to implementing this scheme, Congress should look close to home—in the report of the COPA Commission.

A. Why Was Congress Unable to Craft a Constitutional Statute in COPA?

Congress carefully considered the Supreme Court's decision regarding the constitutionality of the CDA in Reno, and accordingly drafted COPA much more narrowly in response to the Court's specific concerns. In fact, it addressed each of the main reasons the Court cited for holding the CDA unconstitutional. First, COPA included an "exception" for provid-
ers that used age verification technology to prevent their material from reaching minors, the use of which was no longer as burdensome or expensive as it was when Reno was decided. Second, COPA applied only to commercial providers of web content. Third, Congress defined the prohibited material using the standard upheld in Ginsberg. Fourth, Congress limited COPA to the World Wide Web, whereas the CDA applied to all aspects of the Internet.

Despite these changes, the Supreme Court in Ashcroft still found that COPA imposed impermissible burdens on adult speech. In so ruling, the Court focused on the availability of filtering technology as a plausible, less restrictive alternative to COPA. However, an analysis of the range of options available to Congress and other governmental actors for protecting children reveals other reasons why COPA, and indeed all statutes that attempt to directly regulate and proscribe pornography and sexually explicit content on the Internet, might be unable to pass constitutional muster.

B. What Options Remain for Curtailing Sexually Explicit Speech on the Internet?

Because of the intense political and popular concern with pornography on the Internet, Congress is unlikely to abandon the search for a governmental solution to this problem. There is a range of options left open to Congress, spanning the spectrum from purely legislative to purely technical. Each set of options presents a unique set of legal problems, with different potential effects on First Amendment freedoms and the nature of the Internet. It is important to fully consider the challenges of the different options that legislators face, and the consequences of any particular regulatory strategy.

89. It should be noted, however, that the content at issue need not have been provided commercially—the statute only required that the site through which the content is provided be a commercial enterprise. 47 U.S.C. § 231(e)(2)(B).
90. See id. § 231(e)(6); Ginsberg v. New York, 390 U.S. 629, 631 (1968).
93. Id.
94. See infra Part III.B.1.
95. See Lessig & Resnick, supra note 82, at 396.
1. Purely Legislative/Legal Proscription

Even if, on remand, COPA is permanently enjoined by the courts, Congress may deem the problem of children's access to pornography on the Internet important enough to craft yet another statute imposing liability on providers of such content. In Ashcroft, the Supreme Court did not provide any guidance as to how the statute could be narrowed to be permissible because it did not reach the issues of overbreadth or vagueness.\textsuperscript{96} However, in a world where the Internet exists, it would be difficult to narrow COPA to be constitutional—either by changing the definition of illegal speech or by providing more affirmative defenses—while still allowing the law to reach beyond obscene speech, which is already unprotected, to impose meaningful limits on providers of web content.

One reason for this difficulty is peculiar to the context of pornography and indecent speech, traditionally defined in terms of "community standards."\textsuperscript{97} The definition of "illegal" speech in COPA is virtually identical to the obscenity standard in Miller but for its references, in each provision, to individuals who are minors.\textsuperscript{98} Since the Miller standard is based on a regime whereby obscenity is defined with reference to the norms and standards of a real-world community, it may be impossible to apply this legal rule to the Internet at all.\textsuperscript{99} The Supreme Court has made it clear that obscenity is to be judged on a local community standard, not a national one, to avoid effectively forcing all speakers to tailor their speech to the least tolerant or most sensitive listeners.\textsuperscript{100} Although this inevitably leads to variations in the obscenity standard from community to community, the Court has reasoned that this variation is desirable, because "our Nation is simply too big and too diverse for this Court to reasonably expect that such standards could be articulated for all 50 States in a single formulation."\textsuperscript{101}

In a non-Internet case involving the transmission of allegedly obscene materials, therefore, obscenity is adjudicated based on the community standards of the locality in which the material is received, assuming the

\begin{itemize}
  \item \textsuperscript{96} Ashcroft, 124 S. Ct. at 2791 (affirming the district court's grant of a preliminary injunction based on the reasons relied on by that court, thus obviating the need to address the issues of overbreadth and vagueness, relied on by the court of appeals).
  \item \textsuperscript{97} See, e.g., Miller v. California, 413 U.S. 15, 24 (1973).
  \item \textsuperscript{98} Compare 47 U.S.C. § 231(e)(6) (2000), with Miller, 413 U.S. at 24.
  \item \textsuperscript{100} Id.
  \item \textsuperscript{101} Miller, 413 U.S. at 30.
\end{itemize}
sender knew the material would end up there.\textsuperscript{102} With the structure of the World Wide Web as it is, it is all but impossible for a content provider to know where his or her content might "end up,"\textsuperscript{103} thus leading to a serious case of the tailoring-to-the-most-sensitive-listener scenario described above. Professor Mark Alexander has suggested several possible regimes for determining where to "find" a community standard for the definition of obscene and indecent speech.\textsuperscript{104} Alexander's options for pinpointing the relevant community are as follows: (1) where the material was downloaded; (2) where the material was uploaded; (3) a "virtual community standard"; and (4) a national standard.\textsuperscript{105} Alexander ultimately concludes that none of these solutions are truly workable.\textsuperscript{106} This impossibility creates severe problems for any scheme of regulating sexually explicit content over the Internet, for Congress has yet to write a constitutionally permissible definition of proscribed content that does not include reference to "community standards."

There is also some argument that the fundamental characteristics of the Internet as a medium make it effectively impossible for the government to target any broader range of speech than that which is already unprotected by the First Amendment. A statute that intends to reach more than obscenity must necessarily be written in somewhat broad terms. The architecture of the Internet in turn dictates that a broad content-based regulation imposed from without will likely always burden a large amount of lawful adult speech. Furthermore, a technical solution imposed by the user will almost always be less restrictive. Technological solutions, unlike purely legislative ones, both allow parents to have control over what their children view and can affect material coming from outside the legislative jurisdiction.\textsuperscript{107} This observation squares with the results in \textit{Ashcroft} and \textit{Playboy}, both cases invalidating broad legislative restrictions where user-controlled protections imposed at the receiving end were available and accomplished the same goals as the statutory scheme.\textsuperscript{108} In sum, the nature

\begin{thebibliography}{99}
\bibitem{102} See id. at 30-34.
\bibitem{103} See, e.g., Nitke v. Ashcroft, 253 F. Supp. 2d 587, 594 (S.D.N.Y. 2003) ("[I]t is currently impossible for website operators to make their sites accessible from some communities but not others.").
\bibitem{104} Alexander, \textit{supra} note 99, at 1008-15.
\bibitem{105} Id.
\bibitem{106} Id. at 1015.
\bibitem{107} Recall that these two features formed the major basis for the Court's finding that there existed less restrictive and more effective alternatives to COPA. See Ashcroft v. ACLU, 124 S. Ct. 2783, 2792 (2004).
\bibitem{108} Id. at 2792; United States v. Playboy Entm't Group, Inc., 529 U.S. 803, 815 (2000).
\end{thebibliography}
of communications on the Internet means that applying a purely legislative solution will burden a large amount of protected speech and less restrictive technological solutions will be available.

In addition to the legal limits that may circumscribe Congress’s efforts to legislate in this arena, there are some practical concerns that make legislative action infeasible. First, the interaction between laws enacted by Congress and independently developing technologies can be very complex. Both the CDA and COPA were invalidated for reasons having to do almost solely with technology—the CDA because workable age verification methods were not yet available, and COPA because a plausible, less restrictive means of accomplishing the government’s goals existed in filtering technology. Even if Congress can act quickly enough to legislate around new technologies, more technological change is always right around the corner, often ready to alter the balance struck by Congress. It is axiomatic that technology often changes faster than Congress can make new laws to fit around it, and fit they must.\(^\text{109}\)

In a similar vein, laws inevitably require interpretation by the courts, especially where the laws are the highly controversial regulations of indecency that have almost always been instantly challenged by civil liberties groups. The quickly-changing nature of technology presents significant obstacles to the judicial process due to the danger that appellate courts will rely on outdated trial court findings.\(^\text{110}\) When the Supreme Court heard oral arguments in *Reno v. ACLU*, little more than a year had passed since the district court made its evidentiary findings.\(^\text{111}\) However, during this short time period, the Internet had experienced a great deal of technological change, such as the proliferation of newsgroups, listservs, and chat rooms on the World Wide Web, and the development of age verification technologies.\(^\text{112}\) The government urged the Court to take cognizance of these technological changes, arguing that they changed the constitutional calculus in the case.\(^\text{113}\) Although the Court acknowledged the inaccuracies, it refused to consider facts not in the record, limiting its review to the outdated factual findings of the district court.\(^\text{114}\) Similarly, in *Ashcroft*, the Court mentioned as a “practical consideration” the fact that the limited


\(^{110}\) Id. at 270-72.

\(^{111}\) Id. at 290.

\(^{112}\) Id. at 291.

\(^{113}\) Id.

\(^{114}\) Id. at 292; Reno v. ACLU, 521 U.S. 844, 856-57 (1997) (stating that the record did not contain any evidence that the technological changes were effective).
factual record in this case was, by the time it reached the Supreme Court for the second time, five years old, due to delays in the appellate process.\(^{115}\) The *Ashcroft* case is a somewhat extreme example of this occurrence but the principle remains the same: courts, like legislatures, cannot adapt or address issues quickly enough to keep up with changing technology. As one commentator put it, "the law, which generally is accustomed to leading, will, at least for the foreseeable future, have to follow and be guided by technology."\(^{116}\)

Despite these concerns, a few commentators have suggested ways to write a prescriptive statute that would pass constitutional muster. First, despite the failure of Congress's efforts to narrow the CDA, there is still some opportunity to narrow COPA even further. One fairly simple approach would be to abandon the paradigm of criminal punishment, leaving in place the possibility of civil liability.\(^{117}\) This approach can be criticized, however, on the grounds that the actors Congress most desires to punish, those who provide large quantities of pornographic material as their main line of business, would likely be able to accept civil penalties as merely a "cost of business," while smaller, less troublesome providers would be forced out of business.

Alternatively, the third prong of the definition of "harmful to minors,"\(^{118}\) which roughly corresponds to a minor-focused version of the third prong of the *Miller* standard,\(^{119}\) could be changed to more closely follow *Miller* and *Ginsberg*.\(^{120}\) Specifically, this subsection could do the following: consider each image or graphic file on its own merits, instead of with respect to the communication as a whole; add "educational" and "medical" values to those already listed; and determine value with respect to any minor, not all minors.\(^{121}\)

Some commentators have posited reasons why a fundamentally legislative alternative is preferable to a purely technological one. For example, government officials might be best suited to craft the proper controls because they "make it a point to know the issues relevant to the public" and because they are proactively informed, by citizens and lobbying groups,

---

117. *Id.* at 1198-99.
118. 47 U.S.C. § 231(e)(6)(C) (2000) ("The term 'material that is harmful to minors' means any communication, picture, image, graphic image file, article, recording, writing, or other matter of any kind that is obscene or that . . . taken as a whole, lacks serious literary, artistic, political, or scientific value for minors.").
119. See supra Part I.A.
120. *Zick*, supra note 116, at 1198.
121. *Id.*
about relevant technological advances in the field. In addition, government legislation comes with built-in enforcement mechanisms, unlike industry control or incentive techniques.

Despite demonstrated problems with legislation targeting the Internet, Congress might insist on pursuing another legislative approach to this problem, due to perceived weaknesses in regimes allowing or even encouraging local and parental actors to implement their own protection measures. For example, Congress does not seem to have much faith in the ability of parents to adequately protect their children from the evils of sexually explicit material online. This concern does not seem to stem from lack of faith in the technological efficacy of filtering software—indeed Congress’s own COPA Commission cited filtering as a favorable solution both on efficacy and restrictiveness grounds—but rather from the fear that some parents will not know enough or care enough to protect their children when they surf the web. Congress might also lack faith in a solution that does not carry the force of law. Finally, to please constituents and lobbying groups alike, Congress might simply be unwilling to let such a politically salient issue fall through the cracks.

2. Imposing or Encouraging Implementation of Technological Solutions

Another often-posited option for Congress to address these problems, which falls somewhere in the middle of the legislative action/inaction spectrum, is for Congress to encourage the implementation of various technological solutions that would at least partially, and sometimes completely, fulfill Congress’s objectives. Since, as described above, technological solutions frequently trump legal ones in a constitutional challenge, Congress should explore ways to implement these technologies or to encourage their implementation by third parties.

Some commentators have suggested that Congress can effectively control harmful-to-minors content on the Internet, but in a different manner than in the CDA and COPA. One way of conceptualizing and contrasting two basic approaches is as “top-down” versus “bottom-up” approaches. CDA and COPA are top-down approaches, attempting to prevent minors

123. Id. at 1859.
124. COPA REPORT, supra note 5, at 19-22.
126. See Alexander, supra note 99, at 1021.
from accessing harmful materials online by stopping the problem at the source—the content providers themselves. A bottom-up approach, such as filtering, would attempt to combat the negative consequences not at the source, but at the receiving end. Acceptance of a bottom-up approach over top-down led to the result in *Playboy*, where the Court invalidated an FCC regulation of cable providers because there was a plausible, less restrictive bottom-up alternative.  

Scholars have noted the desirability of this switch from a "stick" to a "carrot" approach to regulating Internet behavior.

In *Ashcroft*, however, the government objected to the Court’s reliance on user-implemented Internet filtering as a plausible less restrictive alternative to COPA because Congress is unable to mandate the use of filters through legislation. The Court responded that while filtering could not be mandated, it could be strongly encouraged through a variety of means, and this possibility of encouragement was enough to satisfy this requirement. In *Playboy*, the Court accepted a receiving-end solution which could be offered to cable subscribers but not mandated by the government, as a plausible less restrictive alternative that undermined the government’s claim of narrow tailoring of the restriction imposed by the FCC.

Despite its objections in *Ashcroft* to the substitution of filters for legislation, the government has recognized the viability of this approach to regulating minors’ access to sexually explicit material on the Internet. The Children’s Internet Protection Act (CIPA) imposes as a condition for the receipt of federal subsidies for Internet access and computer technologies that libraries must enable filtering software on all Internet-accessible computers. CIPA’s regime places restraints on children’s access to the Internet in a certain space by empowering and requiring local libraries to make decisions and to take steps to combat this problem. CIPA has the benefits of being flexible (as local laws and implementations can change more quickly than federal ones) and adaptable to local community standards, while giving Congress a measure of control over the tackling of this problem.

---

127. United States v. Playboy Entm’t Group, Inc., 529 U.S. 803, 824 (2000) ("It is no response that voluntary blocking requires a consumer to take action.").
129. *Ashcroft*, 124 S. Ct. at 2793.
130. *Playboy*, 529 U.S. at 815.
Encouraging the use of filters, either through legislation such as CIPA or advertising campaigns, as suggested by the Supreme Court, is not the only bottom-up approach available. Two other schemes are creation of certificate authority and mandatory labeling.

One mixed legislative and technological approach, which has already been implemented by a group called the World Wide Web Consortium (W3C),\textsuperscript{132} is a labeling scheme. W3C’s project is called the Platform for Internet Content Selection (PICS).\textsuperscript{133} PICS attempts to solve the problem of imprecise identification of objectionable sites, presented by available filtering software, by establishing a “language” through which all content on the Internet would be labeled, either through independent labeling services or by content providers themselves.\textsuperscript{134} Thus, in theory users, by purchasing and implementing filtering software that “speaks the language” of the PICS rating system, would have much more control over the content flowing to their computer screens.

Congress could also use legislation to directly impose technological solutions. Even COPA itself indirectly acknowledges the appropriateness of a technological solution, effectively placing technological requirements on providers of web content by including the affirmative defense of age-verification screens. Professor Lawrence Lessig proposes a unique approach in this vein: a legislative solution imposed by Congress that would both restrict the distribution of undesirable speech directly and create a technological method of enforcing these restrictions.\textsuperscript{135} His proposed statute would ban, under civil penalties, the distribution of \textit{Ginsberg} speech (speech that is obscene with respect to minors) if it is either knowingly distributed to children or distributed without verifying the age of the recipient.\textsuperscript{136}

The key second element of this regime, which clearly sets it apart from the CDA and COPA, is the establishment of a central “certificate authority” that would enable the age-verification procedures mandated in the statute.\textsuperscript{137} The central authority would enable other private organizations to issue to an Internet user a technological mechanism known as a digital

\begin{itemize}
  \item \textsuperscript{132} See World Wide Web Consortium, \textit{About the World Wide Web Consortium (W3C)}, at http://www.w3c.org/consortium (last updated Jan. 18, 2005).
  \item \textsuperscript{133} See W3C, \textit{Platform for Internet Content Selection (PICS)}, at http://www.w3c.org/PICS (last updated Oct. 22, 2003).
  \item \textsuperscript{134} Lawrence Lessig, \textit{What Things Regulate Speech: CDA 2.0 vs. Filtering}, 38 \textit{JURIMETRICS} J. 629, 659 (1998); see also W3C, \textit{PICS Statement of Principles}, at \texttt{http://www.w3.org/PICS/principles.html} (last visited Jan. 27, 2005).
  \item \textsuperscript{135} Lessig, \textit{supra} note 134, at 650-51.
  \item \textsuperscript{136} Id.
  \item \textsuperscript{137} Id. at 651.
\end{itemize}
certificate, an encrypted digital object that allows the holder to make credible assertions about him/herself without revealing his/her identity.\textsuperscript{138} These certificates would be issued anonymously and could be verified by any site on the Internet at low cost.\textsuperscript{139} Although this approach is essentially legislative in nature, its proscriptive provisions are bolstered by implementation of a technological solution.

The civil penalties imposed by this proposed statute would pose less of a threat to free speech and create less of a chilling effect than the criminal penalties of COPA. Moreover, integral to Lessig’s proposed statute is a technological solution that would alleviate many of the concerns of a more broad and \textit{purely} legislative approach such as COPA.\textsuperscript{140} Thus, although the incentives, mandate, and implementation of the technology would come from above, the control over the technology and content would come from below—from providers and consumers of web content.

The question remains, however, whether despite the arguments that purely legislative approaches are more often than not too burdensome on freedom of expression, technological solutions might in fact be even more burdensome, whether their use is private or public, voluntary, or encouraged. There are threats to key values presented by a standardized, universal system of verifiable identification—anonymous speech, for example, could get lost in the shuffle, and the fundamental free-flowing and open nature of the Internet could be endangered. In addition, unless constraints were placed on the certificate authority’s use of personally identifiable information, such a scheme could present huge threats to personal privacy.\textsuperscript{141} Furthermore, in Lessig’s own words, do we really want to allow Congress to “regulate the architecture of the Net to make its content more regulable”?\textsuperscript{142}

Some scholars have also suggested that widespread use of filtering technology may be more damaging overall to free speech interests than would a rule of general applicability such as COPA or the CDA.\textsuperscript{143} Lessig argues that a “CDA-like” regulation would “minimize the amount of speech subject to content discriminating technologies... [and] minimize

\begin{itemize}
\item \textsuperscript{138} \textit{Id.} at 649-50.
\item \textsuperscript{139} \textit{Id.} at 650-51.
\item \textsuperscript{140} COPA, although it did indirectly impose technological requirements on providers of web contents, was not supported by any consideration or explanation of how these requirements were to be fulfilled, or whether it was even technically feasible to fulfill them. \textit{See id.} at 648-49.
\item \textsuperscript{141} COPA \textit{REPORT}, supra note 5, at 27.
\item \textsuperscript{142} Lessig, supra note 134, at 650.
\item \textsuperscript{143} \textit{See, e.g., id.} at 632.
\end{itemize}
the role the government has in facilitating this discrimination." He finds filtering software to be damaging in both the public context (such as libraries) and in private (such as homes). Lessig cites as a main problem with filtering technology the fact that the lists of "blocked" sites are privately created and held in secret, giving users no guarantees that "sites are not included [on the list] for the wrong reasons." In addition, filtering algorithms are crude and imprecise, and often filter content that comes nowhere close to Ginsberg speech, which Congress has an interest in curtailing. Furthermore, although the idealistic vision of filtering places control over a child's Internet consumption in the hands of his or her parents, private filtering technology passes this control to corporations, schools, libraries, and the government. Similarly, PICS is problematic because it is a generalized system, enabling labeling and blocking of content based on any criteria (not just that which might be offensive to children), and can be imposed invisibly at any point in the flow of information on the Internet.

The report of Congress's own COPA Commission analyzes the relative benefits and burdens of various legal and technological approaches to the problem. Interestingly, this report, written by an entity created at the time of the passage of COPA to "identify technological or other methods that will help reduce access by minors to material that is harmful to minors on the Internet"—contradicts Congress's choice of regulatory methods. The report takes into account the effectiveness and accessibility of various solutions, almost all of which were technological in nature, the characteristics of the Internet, and potential detrimental effects on the freedom of speech. The COPA Commission report provides a useful analysis of the benefits and drawbacks of particular technological solutions. The report cites filtering technology as one of the most effective and accurate (that is, non-restrictive) protectors of children online. On the other hand, age verification systems based on credit cards, the technology that could allow a web content provider to assert an affirmative defense under COPA, are described as an undesirable solution because of lack of effectiveness (for example, some children have access to credit cards), burden on web pro-

144. Id. at 646-47.
145. Id. at 652-58.
146. Id. at 655.
147. Id. at 654.
148. Id. at 658-60.
150. COPA REPORT, supra note 5.
151. Id. at 19-22.
providers, and the potentially huge impact on privacy and First Amendment values. The report provides some informative criticisms of Lessig's type of solution, an age verification system based on an independently issued ID, noting burdens on web providers in establishing a verification system, burdens on consumers in procuring identification, and adverse effects on privacy. Although Lessig's particular proposal may avoid some of these issues, through requirements for data security and anonymity to protect privacy, these critiques remind us that no technological solution is perfect. As a result, Congress must be careful if it chooses to impose or encourage such a solution.

3. Hands-Off, Non-Legislative Solutions

Even if Congress fails to follow COPA with yet a third attempt, it is simply not the case that children would inevitably run rampant in accessing harmful sexually explicit materials on the Internet. Congress may well not remain idle: despite having its efforts curtailed in this arena on numerous occasions, "[s]tilt the voters cry for protection for their children." However, Congress's ability and tendency to respond to such public desires can prove troubling where speech is concerned. To uphold the fundamental First Amendment goal of protecting the people from the dangers of government suppression of unpopular ideas, a legislature "must be prepared to put aside popular political positions and defend the rights of those who say things of which the public thoroughly disapproves ... [such as] pornographers." As mentioned above, Congress is also ill-suited to address these issues because of the quickly-changing nature of technology. Some have argued that Congress should give up, to avoid its recurring "faulty regulatory approaches to incendiary expressive activity," which are often driven more by politics than by a considered approach to the problem. Indeed, there are myriad ways these problems can be addressed without any official assistance on the part of the legislative branch.

152. Id. at 25-26. It would, at first, seem strange that Congress chose to include age verification systems as an integral part of COPA, given this unfavorable analysis by the group Congress created to study the effectiveness of these technologies. However, it should be noted that the COPA Commission was created at the time of passage of COPA, when these legislative decisions had already been made.

153. COPA REPORT, supra note 5, at 27.


155. Id. at 1000 (quoting Floyd Abrams,Clinton vs. the First Amendment, N.Y. TIMES, Mar. 30, 1997, at F42).

156. Id.
Congress could entrust localities to deal with the problem, either by formal or informal means.\textsuperscript{157} This method, unlike the one described above, would, without incentives, entrust local governmental bodies to determine what is acceptable for their communities and create and apply their own laws accordingly.\textsuperscript{158} Action at the state level has proven to be varied, evidence that the states are taking matters into their own hands and taking the action they deem appropriate. Some states have developed their own legislation, often mimicking CIPA’s approach; some have encouraged filters more narrowly, say in public schools but not public libraries; and others have merely passed resolutions encouraging the federal legislature to explore other avenues of protection, such as top-level domain controls.\textsuperscript{159}

Congress could also leave it up to individual parents, schools, and libraries to deal with the problem, with no legislative action on Congress’s part. Parents would be given the autonomy to decide what should and should not be viewed by their own children, while adults without children would be free to exercise their First Amendment rights to access constitutionally protected material. While this theory does not account for parents who do not realize or comprehend the gravity of the problem of indecent material online as Congress sees it, the Court has recognized parents’ right to determine the manner of upbringing of their own children.\textsuperscript{160} Furthermore, the fear that parental cooperation will not emerge when leaving a plausible, less restrictive solution in the hands of parents does not disqualify that solution.\textsuperscript{161}

Finally, stepping back and allowing the development of industry-based self-regulation or market-driven solutions could be quite effective.\textsuperscript{162} In a way, this method has already been implemented. For example, pornography is now quite frequently protected behind credit card verification schemes, for the simple reason that providers want users to pay for it.

\textsuperscript{157} For formal means of “encouraging” localities to apply controls, see supra Part III.B.2.\
\textsuperscript{158} Alexander, supra note 99, at 1021-24. However, to avoid the above-mentioned problems with community standards, even local enforcement should be limited to the “extent that any online pornographer has minimum contacts with the locality . . . .” Id. at 1025.\textsuperscript{159} Id. at 1026.\textsuperscript{160} Ginsberg v. New York, 390 U.S. 629, 639 (1968) (noting that “parents’ claim to authority in their own household to direct the rearing of their children is basic in the structure of our society”).\textsuperscript{161} Ashcroft v. ACLU, 124 S. Ct. 2783, 2793 (2004) (stating that the “need for parental cooperation does not automatically disqualify a proposed less restrictive alternative”).\textsuperscript{162} See Alexander, supra note 99, at 1027-30.
However, there are still many commercial websites providing free explicit content, arguably the only content providers targeted by the statute because non-free content is age verified by the very nature of e-commerce. Additionally, many user-based filtering programs are now available for purchase at reasonable prices, with new technological advances occurring all the time, presumably in response to heightened consumer demand for such products.

The COPA Commission's recommendations exemplify a superb balance between the government's impetus to regulate access to sexually explicit materials on the Internet and the constraints of law and technology placed on it. The Commission's recommendations call for four activities: "aggressive efforts toward public education, consumer empowerment, increased resources for enforcement of existing laws, and greater use of existing technologies." None of these solutions would require official action by Congress.

These recommendations blend voluntary and encouraged activities with options for affirmative acts on the part of governmental bodies that remain less drastic than broadly written legislation or congressional mandate of technological solutions. For example, the Commission recommends encouraging voluntary action on the part of consumers and industry, such as through collaboration between government and the private sector on an informational campaign "to promote public awareness of technologies and methods available to protect children online." The report outlines a plan for the promotion of ISP-based acceptable use policies, which are binding contractual terms to which consumers of Internet services (including hosting and serving services) must adhere. It also recommends allocation of public funds to assess and even develop new technologies of "child protection," and collaboration with the private sector in doing so. As far as legal action is concerned, the Commission recommends only enforcement of existing laws against obscenity and child pornography, categories of speech that are already unprotected by the First Amendment, not devising new statutes to target other types of speech. Finally, the Commission recommends encouragement of volun-

163. See id. at 982 ("The great majority of pornographic websites are actually free and serve as 'bait' or 'teasers' meant to lure people into commercial websites.").
164. COPA REPORT, supra note 5, at 39.
165. Id. at 40.
166. Id. at 39-41.
167. Id. at 41-42.
168. Id. at 43.
tary self-regulation on the part of Internet service and content providers and the adult entertainment industry.\textsuperscript{169}

Although this type of scheme may initially appear to be at an extreme of the spectrum, it should not be dismissed merely because it does not require any positive regulation by Congress. It simply takes advantage of a variety of preexisting mechanisms and impetuses—natural advances in technology, market forces and business actors, thorough law enforcement, and perhaps most importantly, parental desire to protect their children from harmful materials on the Internet.

IV. CONCLUSION

The problems that have plagued Congress and the courts in addressing the constitutionality of the CDA and COPA are unlikely to be alleviated. The development of Internet technologies will continue to outpace the legislative and judicial processes, and it is hard to imagine a change to the structure of the Internet so fundamental as to dramatically alter the relative restrictiveness of top-down regulations versus bottom-up solutions.

Due to the ease and effectiveness with which technology can "regulate" the Internet, a solution that does not thoroughly consider and integrate technological methods is unlikely to be even marginally effective, let alone constitutionally permissible. The COPA Commission's four-part plan potentially presents the best balance between satisfying Congress's evident desire to regulate sexually explicit speech on the Internet, and protecting the rights of Internet users. In addition, it has the potential to fully integrate the technological solutions that courts have often cited as plausible, less restrictive alternatives to broad proscriptive statutory controls. Indeed, preserving the somewhat chaotic nature of the Internet in the absence of strict government regulation is preferable to the "adoption of repressive forms of order that would constitute a cure worse than the disease."\textsuperscript{170} If Congress does make a third attempt to craft legislation preventing children from encountering sexually explicit materials on the Internet, Congress should keep in mind the fundamental values of freedom of expression and individual autonomy, and should learn to harness the power of emerging technology in service of its goals.

\textsuperscript{169} Id. at 45-46.

\textsuperscript{170} Hersh, supra note 122, at 1861 (quoting Peter Johnson, Pornography Drives Technology: Why Not to Censor the Internet, 49 FED. COMM. L.J. 217, 218 (1996)).