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# THE CONSTITUTION OF CODE: LIMITATIONS ON CHOICE— BASED CRITIQUES OF CYBERSPACE REGULATION

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Behavior in real space is regulated by three sorts of constraints.<sup>1</sup> Law is just one of these three constraints. Law tells individuals not to deduct more than 50% of the cost of business meals from their income tax; it tells corporations not to resist unionization; it tells police not to coerce confessions from suspects. In this way, we say, law regulates.

But not only law regulates. Social norms also regulate. Norms are a second sort of constraint. Norms say I can buy a newspaper, but cannot buy a friend. They frown on the racist's jokes, and are unsure about whether a man should hold a door for a woman. In far more contexts of our life than law, norms constrain behavior. Norms, in this sense, too, regulate.

And finally there is (for want of a better word just now) nature.<sup>2</sup> It is the third of these constraints, and it too regulates. That I can not see through walls is a constraint on my ability to snoop. That I can not read your mind is a constraint on my ability to know whether you are telling me the truth. That I can not lift large objects is a constraint on my ability to steal. Nature, in these ways, constrains behavior. Nature, in this sense, regulates.

These all are constraints on behavior. But *how* each constraint achieves its effect is different. Law and norms achieve their effects through the

threat of *ex post* punishment – law threatening centralized punishment (police, prosecutors, and courts), norms threatening decentralized punishment (neighbors and busybodies). But nature achieves its effect more directly. One doesn't choose not to see through a brick wall for fear of the punishment that nature will visit upon such an infraction. One simply cannot see through a brick wall. One doesn't choose not to lift an elephant for fear of the *ex post* sanction if one does. One simply cannot lift an elephant. We live life *subject to* the constraints of nature; we live life *choosing* whether to obey the constraints of laws, or norms.<sup>3</sup>

Most regulation talk focuses on law among these regulating constraints. The reasons are not surprising. Law is the most obvious regulatory constraint. It is that regulatory constraint over which we seem to have the greatest control. Law seems most plastic: statutes make the law, and statutes are written; judges interpret the law, and judges could interpret differently. Both facts focus us on law as a regulator. Reformists of both the right and the left ask how law can be made to regulate better.

This last decade in legal scholarship has seen this focus shift somewhat. The work of Ellickson and others has drawn attention to how norms might regulate.<sup>4</sup> The question has been first, does

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<sup>1</sup> Or *at least* three sorts of constraints. I am not claiming that there are no other constraints. Psychology or the market, for example, are constraints which are related to these three primary constraints in complex ways.

<sup>2</sup> By "nature" I don't mean constraints that are not man

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made. A better, if more clumsy construction, would be nature and architecture. As the discussion will suggest, I mean just to point to physical constraints in life, whether man made or not. These are constraints that define a physical environment. Obviously some of such constraints are man made; some not.

<sup>3</sup> This is not to say that the constraints of nature cannot be changed. The car blocking my driveway is a constraint in the sense I mean here; obviously, however, that constraint can be changed. Constraints of nature can be plastic or not, just as constraints of law or norms can be plastic or not.

<sup>4</sup> See generally ROBERT ELICKSON, *ORDER WITHOUT LAW: HOW NEIGHBORS SETTLE DISPUTES* (Harvard Univ. Press) (1991).

law determine norms, and second, and if not, then how do norms regulate, and what makes them as they are. A surprisingly rich literature has now grown up around this question, much of it skeptical of the efforts of governments to regulate or to affect norms,<sup>5</sup> but little skeptical of the idea that norms are real, and that norms are regulating.<sup>6</sup>

But modern legal scholarship has not thought much about how nature regulates. We take nature as we find it. There are important exceptions: Roberto Unger among critical legal scholars developed a powerful language for thinking about how what functions as nature regulates.<sup>7</sup> Outside law, this is Michel Foucault's focus as well.<sup>8</sup> And historically, thought about how nature regulates was quite pronounced – from the focus of the framers on how geography would help define the ideal republic,<sup>9</sup> to the attention that architects in France paid to the design of public streets as a way to break up the resistance.<sup>10</sup> But these examples aside, our modern attention within law to how nature regulates has been quite thin. For the most part, we take nature as given, assume norms are unmanageable, and then ask, how much, or how should, law regulate?

This traditional order is about to change. It is about to invert. We are entering an age where the most important questions will not be how law constrains, but how nature should constrain. We are entering a time when the most difficult questions are not the questions of how far law should go, but how far nature can be made to support law. When the questions are not what norms there are, but how far nature can be made to make norms as they should be. Our focus is about to shift from the most obvious locus of self-conscious, and activist regulation, to the least obvious locus of self-conscious and activist regulation; from a focus on the direct constraints of law, to the indirect constraints that law is able to effect.

Cyberspace will effect this shift. My aim in this short essay is to suggest how. I begin with a sketch of two kinds of regulation (what I call direct and

indirect). Both are regulations, but my argument will be that the second, indirect regulation, is about to become something much more significant. Indirect regulation is about to become more significant both because direct regulation will become less effective, and because the technologies of indirect regulation will become more effective. Or again, the regulatory return from direct regulation is about to fall, while the return from indirect regulation will rise quite dramatically.

This will lead then to a second aim of this essay, more directly trained on Mr. Corn-Revere's chapter of the book that is the subject of this conference.<sup>11</sup> His work is an embrace of a kind of free speech libertarianism. This argument goes something like this: We have entered a time when the "culture of regulation" is strong. It manifests itself a wide range of areas, most forcefully, and problematically, in the area of content regulation of speech. Traditional protections against such content regulation have yielded to a siren: that this space, at this time, is different. Traditional protections have checked out, while we find our bearings in this new age. But we should move immediately back to the world where speech was unregulated, or at least to where regulations of content were exceptionally rare. That is the world we have left, Corn-Revere argues, and it is the world to which we should return.

There is much in this picture of libertarianism that is attractive. There is much that resonates with our constitutional past. But I want to argue that the picture is incomplete, and the distinction the first section draws between direct and indirect regulation will suggest why. This incompleteness, some have argued, was always present. It is about to become unavoidable. And once we complete what libertarianism leaves out, much of the "regulation" that Corn-Revere attacks turns out to be regulation that the libertarian should embrace. This, in turn, will teach us something about libertarianism, and something about the nature of what regulation is becoming.

<sup>5</sup> See *id.* (this was Ellickson's implicit view); cf. Cass R. Sunstein, *Social Norms and Social Roles*, 96 COLUM. L. REV. 903 (1996) (stating that government has a large role in norm management).

<sup>6</sup> Lawrence Lessig, *The Regulation of Social Meaning*, 62 U. CHI. L. REV. 943 (1995).

<sup>7</sup> See generally ROBERTO M. UNGER, *SOCIAL THEORY: ITS SITUATION AND ITS TASK* (Cambridge Univ. Press) (1987).

<sup>8</sup> See, e.g., MICHEL FOUCAULT, *DISCIPLINE AND PUNISH* (Vintage Books) (1977).

<sup>9</sup> Federalist No. 10 (James Madison) (how geography can help to define the ideal republic).

<sup>10</sup> See DAVID H. PICKNEY, *NAPOLEON III AND THE REBUILDING OF PARIS* (1958).

<sup>11</sup> ROBERT CORN-REVERE, *RATIONALES & RATIONALIZATIONS* ch. 1 (1997).

## I. REGULATION IN CYBERSPACE

I said at the start that behavior in real space is regulated by three sorts of constraints (law, norms, and nature) and that the way law and norms regulate is different from the way that nature regulates.

Behavior in cyberspace is regulated in just the same way:

- First, law regulates behavior in cyberspace. Copyright law, defamation laws, and obscenity laws all continue to threaten ex post sanction for the violation of some legal right. How well, or how efficiently, is a separate question. In some cases more efficiently, in some cases not. But whether better or not, law continues to threaten an expected and negative return, and this in ways not much differently from real space. Legislatures enact;<sup>12</sup> prosecutors threaten;<sup>13</sup> courts convict.<sup>14</sup>

- Second, norms regulate behavior in cyberspace: talk about democratic politics in the <alt.knitting> newsgroup, and you open yourself to flaming; "spoof" someone's identity in a MUD, and you might find yourself toaded; talk too much in a discussion list, and you're likely to be placed on a common bozo filter. In each case, there is a set of understandings that constrain behavior in this space, again through a threat of ex post (though decentralized) sanctions.

- Third and finally, an analog to nature, *code*, regulates behavior in cyberspace. The code, or the software that makes cyberspace as it is, constitutes a set of constraints on how one can behave

in cyberspace. The substance of these constraints vary, but they are experienced as conditions on one's access to cyberspace. In some places, one must enter a password before one gains access;<sup>15</sup> in other places, one can enter whether identified or not.<sup>16</sup> In some places, the transactions that one engages produce traces that link the transactions (the mouse droppings) back to the individual;<sup>17</sup> in other places, this link is achieved only if one wants.<sup>18</sup> In some places, one can select to speak a language that only the recipient can hear (through encryption);<sup>19</sup> in other places, encryption is not an option.<sup>20</sup> The code or software or architecture or protocols set these features; they are features selected by code writers; they constrain some behavior by making other behavior possible, or impossible. They too are regulations.<sup>21</sup>

In this sense, then, law, norms and code regulate cyberspace just as law, norms and nature (or what I call "real space code") regulate real space. But there is an important difference between these two regimes. In real space, constraints are changed by changing law; in cyberspace, constraints will be changed by changing code.<sup>22</sup> This will follow because of two features of these two different worlds: First: In real space, it is law that is plastic; in cyberspace, it is code that is plastic. And second: In real space, it is relatively hard to escape the constraints of law; in cyberspace, it is much easier.<sup>23</sup> The effect of both differences will be to shift the locus of regulatory change from law to code. In real space, law is at center stage, and

<sup>12</sup> The ACLU lists 11 states that passed Internet regulations in 1995 and 1996. (visited Apr. 22, 1997) <<http://www.aclu.org/issues/cyber/censor/stbills.html#bills>>.

<sup>13</sup> See, e.g., Minnesota Attorney General Office's Internet Policy, (visited Apr. 22, 1997) <<http://www.state.mn.us/ebranch/ag/memo.txt>>.

<sup>14</sup> See, e.g., *Playboy Enters. v. Chuckleberry Publ'g*, 1996 US Dist Lexis 8435 (S.D. N.Y. 1996); *United States v. Thomas*, 74 F.3d 701 (6th Cir. 1996).

<sup>15</sup> For example, online services such as America Online.

<sup>16</sup> USENET postings can be anonymous.

<sup>17</sup> Web browser's make this information available, both in real time, and archived in a cookie file.

<sup>18</sup> Web browsers also permit users to turn this tracking feature off.

<sup>19</sup> Pretty Good Privacy (PGP) is a program to encrypt messages. See Jason Kerben, Comment, *The Dilemma for Future Communication Technologies: How to Constitutionally Dress the Crypto-Genie*, 5 COMM'LAW CONSP'CTUS 125 (Winter 1997).

<sup>20</sup> See Comments of Ambassador David Aaron, (visited Apr. 22, 1997) <<http://www.bxa.doc.gov/aaron.htm>> (Encryption, for example, is illegal in some international con-

texts).

<sup>21</sup> Joel R. Reidenberg, *Governing Networks and Rule-Making in Cyberspace*, 45 EMORY L.J. 911 (1996); David Johnson & David Post, *Law and Borders-The Rise of Law in Cyberspace*, 48 STAN. L. REV. 1367 (1996).

<sup>22</sup> This is not the architecture of the net as it is right now. Today, rich code regulation is not possible. This is, however, the direction that I believe the code is moving. See Lawrence Lessig, *The Zones of Cyberspace*, 45 STAN. L. REV. 1403 (1996).

<sup>23</sup> The argument that law is relatively less effective in cyberspace than in real space is well known, and in my view, too strongly made. It is true that, given architectures of the space as they exist just now, law is at a disadvantage. But it doesn't follow from this that law couldn't force code to be structured such that law would be more effective. But I put to one side the question of how effective law could be made. It is still true that code will be relatively more effective, or efficient. And it is this comparative advantage that I want to consider. See David G. Post, *Anarchy, State, and the Internet: An Essay on Law-Making in Cyberspace*, 1995 J. ONLINE L. art. 3. Par. 4 (1995) (on the weakness of law in code space).

code is an afterthought. In cyberspace, the game is code. Law is a side-show.

This difference is more than a difference in efficiency. The question is not just which achieves a collective end more cheaply. The difference is also a difference in *how* law and code regulate. Law (and norms) regulates mediately, through the threat of *ex post* sanction, while code, in constructing a social world, regulates immediately. We live life *subject to* the code, as we live life *subject to* nature. Just as we do not choose whether to see through a wall or not, we don't choose whether to enter America Online without giving our password. Superman might choose whether to see through a wall; and hackers might be able to choose whether to enter AOL with a password. But we are neither supermen nor hackers (if such a distinction exists). We live life subject to the constraints of code, however (and by whomever) these constraints have been set.

Code then regulates then as nature regulates. It has the power of nature and is experienced as nature. And yet, code is more plastic than nature. It functions as a kind of naturalized politics. It is a way to codify political choice, or a way to more quickly move political choice into the background. It is a mechanic for social construction – for it is obviously a construction, and it plainly defines the social world that lives life subject to it. But it constructs a social world differently from how norms, or law, constructs a social world. Not necessarily worse, or better, just differently.

This difference forces a choice on us that in real space we ordinarily ignore. If behavior is regulated by these three sorts of constraints, then in principle we could substitute one constraint for another – substitute, for example, a law constraint for a norm constraint; or a norm constraint for a code constraint; or a code constraint for a law constraint, and so on. With real space regulation, because norms and real space code are relatively nonplastic, we don't think much about this trade-off.<sup>24</sup> In cyberspace, however, the trade-off is una-

voidable.

In cyberspace, because code is so plastic and so powerful, and because law is so feeble and (on an international scale) so rigid, code has a comparative regulatory advantage over law. A gap in legal regulation will therefore emerge, and code will fill that gap. Structures of regulation get codified in the architecture of the net, and these structures of regulation entail important values choices. Whether information will be kept private, whether encrypted speech is allowed, whether anonymity is permissible, whether access is open and free – these are all policy choices made by default by a structure of code that has developed – unaware at times, and, generally, uncritically of the politics that code entails.

Some argue that this shows that government should simply get out of the way. That government should let code regulate, and defer to its regulations in this space.<sup>25</sup> But this is quite unlikely. We shouldn't expect government simply to cede jurisdiction over cyberspace to Barlow-types.<sup>26</sup> Instead, government will shift to a different regulatory technique. Rather than regulating behavior directly, government will regulate indirectly. Rather than making rules that apply to constrain individuals directly, government will make rules that require a change in code, so that code regulates differently. Code will become the government's tool. Law will regulate code, so that code constrains as government wants.<sup>27</sup>

There are then two techniques for regulating cyberspace – direct and indirect – and to-date, governments have adopted both techniques. Some laws regulate behavior directly. States, for example, are making it a crime to utter fighting words on the Internet, or making it a crime to gamble on the Internet.<sup>28</sup> But more and more frequently, governments regulate indirectly, by either requiring that code be modified in some way to achieve a preferred primary behavior, or by inducing norms governing cyberspace to favor a preferred behavior. Some proposals embrace

<sup>24</sup> There are important exceptions. See, e.g., Eric A. Posner, *The Regulation of Groups: The Influence of Legal and Nonlegal Sanctions on Collective Action*, 63 U. CHI. L. REV. 133 (1996) (examining the costs of trading norm constraints for law constraints); See also BRUCE ACKERMAN, *SOCIAL JUSTICE IN THE LIBERAL STATE* (1980) (a theory of social justice predicated upon a technology that could substitute code constraints for law constraints).

<sup>25</sup> Johnson & Post, *supra* note 21.

<sup>26</sup> See John Perry Barlow's, Declaration of Independence for Cyberspace, (visited Apr. 22, 1997) <[http://www.eff.org/pub/Publications/John\\_Perry\\_Barlow/barlow\\_0296.declaration](http://www.eff.org/pub/Publications/John_Perry_Barlow/barlow_0296.declaration)>.

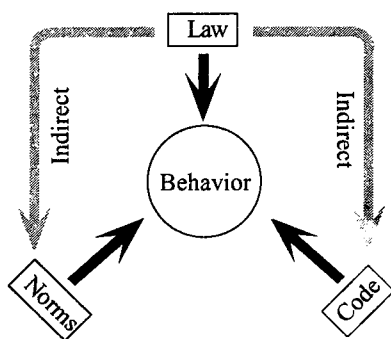
<sup>27</sup> Another way to view this is law regulating norms, so that norms constrain as government wants.

<sup>28</sup> Minnesota, for example. See Minnesota Attorney General Office's Internet Policy, *supra* note 13.

both techniques. The government's White Paper on Intellectual Property, for example, speaks of law regulating differently, and of law regulating norms, and code, so that norms and code regulate differently.<sup>29</sup> But the trend, I suggest, will be towards indirect regulation, an in the section that follows, I give examples of how.

## II. INDIRECTION IN CYBERSPACE

My claim so far has been simply descriptive. I've distinguished among the constraints of law, norms, and code, and I've distinguished between the direct regulations of law, and the indirect regulation (by law) of law, and norms, and code. This latter distinction we can represent graphically as in Figure 1: the three boxes represent the three types of constraint that I have described. In the center is the resulting constraint of the three. Law, norms, and code each have a direct effect; that effect is represented by the arrows within the three boxes. But law can also have an effect on code, or norms, represented by the arrows outside the three boxes. The arrows outside represent indirect regulation; the arrows within, direct.



This topology maps real space regulation. It maps cyberspace regulation as well. But its proportions in cyberspace are quite different from its proportions in real space. For again, the possibility of regulation through code in cyberspace is far greater than the possibility of regulation through code in real space. And the possibility of regula-

tion through law in cyberspace is far less than in real space.<sup>30</sup> Thus cyberspace will make more salient questions about how code regulates, and more critical questions about how law regulates code.

For law now plainly regulates code. Consider just three examples drawn from the work the last two Congresses: Each aims to regulate cyberspace indirectly, by regulating code directly:

### A. Digital Telephony Act

The first examples is Congress' recent Digital Telephony Act.<sup>31</sup> As telephone networks have moved from analog to digital, and as switching technologies have moved from central switching to distributed, this change (in the code regulating networks) has had an important consequence for law enforcement. No longer is there a predictable path through which a telephone call will pass, and hence no longer is it an easy matter to tap a phones on a digitally switched network.

This is so, at least, with *one version* of the architecture of a digitally switched telephone network. *Other* versions of that architecture are less difficult to tap. The architecture of telephone networks could be designed either to make it "wire-tap accessible" or "wire-tap inaccessible." The difference is simply a choice of code. And whatever code is chosen, plainly values of privacy or evasion are implicated by the code.

The Digital Telephony Act is a choice about those values. It required that telephone companies select a network architecture that facilitates wiretapping. It required, that is, a code that facilitated the government's objective of being able to tap when it had authority to tap. The government chose this mode of regulation over another that was certainly available – the government could, that is, have simply increased punishments to overcome the loss in enforcement ability. But its choice was different, and this no doubt because of the values at stake.

This is law regulating code. It is a regulation

<sup>29</sup> The regulation of norms is through educational programs, that are designed to increase the stigma associated with the theft of intellectual property. The regulation of code is through laws that make code-breaking code illegal, and through encouragement of the development of intellectual property protecting code, such as encryption, or digital signatures. See Bruce A. Lehman, *The Report of the Working*

*Group on Intellectual Property Rights* (U.S. Patent and Trademark Office) Sept. 1995.

<sup>30</sup> Johnson & Post, *supra* note 21.

<sup>31</sup> Digital Telephony Act of 1994, Pub. L. No. 103-414, 108 Stat. 4279. See also Susan Freiwald, *Uncertain Privacy*, 69 SO. CAL. L. REV. 949 (1996) (discussing the Digital Telephony Act).

designed to reduce the constraints that code might create for law enforcement. Its indirect effect is therefore to improve law enforcement. But it does that by modifying possible code based constraints on law enforcement. It selects a code that distributes the burdens of code in a collectively valued way.

### B. Communications Decency Act

The second example is the Communications Decency Act. ("CDA")<sup>32</sup> In the Telecommunications Act of 1996, Congress enacted restrictions on the production of indecency on the net. These restrictions are of a mixed sort. The prohibitions of the CDA are really paired prohibitions – there is, on the one hand, the banning of indecent speech on the net, and, on the other hand, the permission to speak indecently if one implements a reasonably effective screening technology. The first part of this pair is direct regulation – its a legal ban on primary conduct, backed up by the threat of punishment; the second is indirect regulation – the definition of a safe haven for indecent speech, implemented through code. How then should we understand, or characterize, the two parts combined?

In my view, we should read the two parts together as an indirect regulation of code. Like the Digital Telephony Act, the statute in effect regulates the architecture of the net. It mandates a technology that facilitates discrimination based on age. It is, in effect, a zoning statute.<sup>33</sup> It says that those who want to speak indecently must do so in a particular space – behind electronic screens. The statute is a jobs program for cyberscreen technologies. If it were upheld, we can expect the code of cyberspace to be modified, to better facilitate the government's aim to screen indecency from kids.

### C. The V-Chip

Also within the Telecommunications Act of 1996 was the V-chip regulation.<sup>34</sup> Said Congress, television manufacturers and media producers

must develop a technology to rate broadcasting on television, so that individuals at home can choose to block what they don't want to see. In the most obvious sense imaginable, this too is an indirect regulation through code. It says that televisions must have built-in a code that facilitates discrimination on the part of consumers of television broadcasting. And it does this to advance the aim of the government – that parents be empowered to discriminate.

I find it interesting that this provision didn't raise much constitutional concern, though just why I think that I will defer for the moment. What is important now is just to see the relationship between the CDA and the V-chip. Both are code regulations. They both mandate a certain architecture of code. They both mandate that architecture as a way to facilitate discrimination on the part of the consumer. Both aim, that is, to reduce the costs of discrimination on the part of the consumer. The CDA mandates just one dimension of discrimination – based on age. The V-chip, in principle, mandates a technology with an open ended array of discriminations – based on violence, or sex, or family values. Or again, the CDA *codifies* just one type of discriminatory default, different from where it is just now (it codifies that is the default that children can't get access to indecency), while the V-chip *codifies* an open ended list of discriminatory defaults.

These three acts by the 103d and 104th Congress, then, are three examples of indirect regulation through the regulation of code. How should we evaluate such regulation? Is code regulation more suspect than law regulation? Or more pointedly, can libertarians be as consistent in their opposition to code regulation as they are to law regulation? Is all of this just "regulation" and therefore all subject to the same anti-regulatory libertarian attack?

That is the sense one gets from Mr. Corn-Revere's chapter. It sketches a picture of regulation as disease. "Censorship is contagious," Mr. Corn-Revere writes, and we have apparently caught the contagion. We were promised, in the mid-1980s, "a full recovery" from this disease, but now all

<sup>32</sup> Telecommunications Act of 1996, Pub. L. No. 104-104, § 230, 110 Stat. 56 (codified at 47 U.S.C.A. § 230 (West Supp. 1996)).

<sup>33</sup> This is now the government's argument in the *ACLU v. Reno* case. See Brief for the United States, *ACLU v. Reno*, 929 F. Supp. 824 (E.D. Pa. 1996) (No. 96-511); see also Law-

rence Lessig, *Reading the Constitution in Cyberspace*, 45 *EMORY L.J.* 869, 883-95 (1996).

<sup>34</sup> Telecommunications Act of 1996, Pub. L. No. 104-104, § 551, 110 Stat. 56 (codified at 47 U.S.C.A. § 151 (West Supp. 1996)).

signs threaten a relapse. If the "First Amendment is the immune system," then, Mr. Corn-Revere warns, this "culture of regulation" threatens free society as "the AIDS crisis" threatens the body. Cyberspace, we are told, is becoming a new medium "to spread the disease."

This is scary stuff, but I wonder whether the libertarian should be scared. I wonder more precisely whether a libertarian can think that all such regulation is disease. I want to argue that he or she cannot: That some of the regulation that Mr. Corn-Revere attacks is regulation that the libertarian should embrace. Or alternatively, that if there is reason to attack, it is not reason grounded in libertarianism.

My argument follows from the distinction that I have drawn between direct and indirect regulation. We can see the point by focusing on the last two examples of regulation that I described above – the CDA and the V-chip. In the first, Congress is mandating one dimension of discrimination in the architecture of the net; in the second, Congress is mandating an open ended list of discriminations in the architecture of the net. In the CDA, it is requiring that the net screen by age; in the V-chip, it is mandating that the v-net screen by violence, and sexuality, and any number of other attributes yet to be determined. The first is a very simple, maybe crude discrimination; the second has the potential to be quite sophisticated and subtle. (On the Web, some versions imagine programs being rated by competing rating organizations, and viewers then able to select the rating system they want imposed<sup>35</sup>).

But whether simple or sophisticated, the important point is this: *That both regulations are regulations that increase consumer power.* Both are regulations of the defaults of the net, and given fairly uncontroversial assumptions about what "most people want," both have the effect of giving cyberspace users greater control by setting the defaults to the choice most would select. The CDA does this by setting a default against access to adults sites; that default increases the control of consumers, assuming that most would want to block ac-

cess to these sites; for most, then, want to have access blocked, but those who want to give their kids access would, presumably, still have that right.<sup>36</sup> The V-chip does this even more. It establishes a filtering device that gives views increased control over what kinds of television is displayed on their television. The result of this will be a broader range of television broadcasting, and a greater ability for viewers to select what they wanted to see.<sup>37</sup>

To the extent that these regulations simply increase consumer choice, why should a libertarian oppose them? Without these regulations, it would be harder for consumers to get what they want; with these regulations, it becomes easier. Without these regulations, cyberspace is an undifferentiated, unzoned world; with these regulations, individuals can navigate the space without exposure to what they don't want to see. These are regulations that rationalize the space, in the way a map rationalizes real space. They are about facilitating individual power, against forces the individual can't otherwise control. They are freedom enhancing, not freedom reducing.

The libertarian might respond, however, by distinguishing between the regulations *that code yields*, and the *regulation of code*. She might say, that is, that it is OK that code regulates; but not OK for government to regulate the code. The problem is regulation, whether direct, or indirect, not constraint.

This view might make sense in a relatively stable environment, where it expresses a mildly conservative view against further regulation of given, and constant, constraints. But it makes no sense in a context where the constraint themselves have undergone a radical change.

Imagine that a virus (to continue Corn-Revere's metaphor) wiped out the human race's ability to act according to social norms – that overnight, we simply lost that sense of what was appropriate socially, and the attitude to conform to that view. In this world, one of the three constraints that I have described (law, norms, and code) has disappeared, and the question is whether law, or code,

<sup>35</sup> See, for example, the PICS System (last visited May 6, 1997) <<http://www.W3.org/pub/www/pics>>.

<sup>36</sup> One question not pressed in the present litigation is whether a parent has the right to make indecent material available to his or her kid, the CDA notwithstanding. A plain reading of the statute says not, but one might imagine that an implied parental exception is understood here. On prin-

ciples analogous to the decision in *Kent v. Dulles*, 357 U.S. 116 (1958), we might believe Congress would have to speak more clearly if it intended to invade parental rights like this.

<sup>37</sup> See J. M. Balkin, *Media Filters, the V-Chip, and the Foundations of Broadcast Regulation*, 45 DUKE L. J. 1131 (1996); cf. Malcolm Gladwell, *Chip Thrills*, NEW YORKER, Jan. 20, 1997, at 7.



should fill the gap created by this virus. Should new structures compensate for the collapse in constraint brought about by this elimination of the constraint of norms?

My sense here is that the conservative would support regulation aimed at reestablishing the balance of constraint that existed prior to the infection. And that rather than viewing this regulation as *disease* (as again Mr. Corn-Revere's essay does), he might view this regulation as therapy for a disease. It would be regulation aimed at restoration, not regulation aimed at change.

If you buy this picture with respect to the virus, then I think you are not far from the picture with respect to cyberspace today. For just as my hypothetical virus was imagined to erase the constraints of norms, so too should we see cyberspace today as a place that has erased the constraints of code (meaning real space code). For think again about the regulation of, say, porn – not the regulation against the consumption of porn, but the real world regulations that exist now to assure that porn is not distributed to kids.

Some of that regulation comes from law – not much, but some. Some communities, for example, pass laws that ban the sale of porn to kids; some pass laws that require IDs before porn can be sold; some pass laws that require the presence of a parent before a kid can see porn.<sup>38</sup>

But most of the regulation of the sale of porn to kids comes from norms, and code: Norms that regulate sellers of porn (economic interests notwithstanding), and code that makes it hard for a kid to hide his age, or hard for a kid to travel to the area of a city where porn is sold, or hard for a kid to fake an ID that would make it possible for porn to be sold to him. These constraints of norms and code combine in real space with the constraints of law, and constitute a regime of regulation that limits the sale of pornography to kids.

Cyberspace changed all that. There were still the regulations of law, and let's assume there were as well the regulations of norms. What changed, however, was the regulation of code. Now, because a kid could easily hide his age, code didn't facilitate discrimination in the sale of porn to kids. And now, because it was easy to travel in cyberspace, the code constraint of distance no longer facilitated discrimination in the sale of

porn to kids. What cyberspace did – much as the virus in my hypothetical does – was erase the constraints of code on the distribution of pornography, and thereby erase constraints that facilitated discrimination in the sale of pornography.

The CDA tries to rebuild part of this code. It tries by requiring that the architecture of the space reestablish some of the constraints of real space, to facilitate discrimination in the distribution of porn. And given this reconstruction, it is at least a question whether we should consider this *new* regulation, or simply the re-establishment of an old regime. For if this is the re-establishment of a regime of constraint that existed before cyberspace began, then a view that does not in general oppose constraint needs a stronger argument to resist this sort of re-restraint. Put another way, if the ground for libertarianism is a resistance to new regulation, and if the regulation of the CDA is nothing new, then something more is needed to resist the CDA.

Whether one buys my argument about the CDA or not, it should be clear that some regulation of code is choice enhancing rather than choice disabling. And so the question about this must be, about what can the individual complain? Or more directly, about what can the libertarian complain?

### III. COMPLAINTS ABOUT CHOICE

In the last section I argued that regulations like the CDA and V-chip are regulations of code. And I argued as well that the effect of these regulation of code was to increase individual choice. These were regulations that gave the individual more power to exclude, by giving the individual more power to filter. What principle of libertarianism gives us a reason to resist such regulation?

My sense is that none does: That there is no principle of libertarianism that would resist regulations that enhance individual choice, for in my read at least, libertarianism *is* just that philosophy aimed at maximizing the scope for individual choice. If there is a reason then to resist regulations such as the CDA, or V-chip, the reasons must find their ground outside of libertarianism.

What would that ground be? I don't think we have a well developed tradition for speaking of

<sup>38</sup> See RICHARD A. POSNER & KATHARINE B. SILBAUGH, A GUIDE TO AMERICA'S SEX LAWS 189-206 (Univ. of Chicago

Press) (1996). The ground for this regulation was affirmed in *Ginsberg v. New York*, 390 U.S. 629 (1968).



such a regime. We have flashes of it within our constitutional tradition, but these flashes have been unified only in the work of academics. In that domain, the tradition is the tradition that Sunstein speaks of as Madisonian.<sup>39</sup> It is a tradition that asserts a state interest to muck around with individual choice about speech, so as to assure a mix of speech in the speech market that serves democratic ends.<sup>40</sup> It is a tradition that resists the principle of consumer sovereignty; a tradition that considers the implied aggregation from individual consumer choice just one possible aggregation of social preferences;<sup>41</sup> and that therefore reserves a question about the allocations that are achieved by regimes that perfect individual choice.<sup>42</sup>

From this perspective, there are obvious questions about the regime of choice that this code is producing. My claim is that the code is developing to facilitate individual power to screen speech *automatically*. This, I suggest, is something new. The individual is not confronted with the speech, and then forced to choose not to listen; the individual instead programs her v-, or e-machine, and that program does the screening for her. The system becomes a faithful butler, answering the door, and politely pushing the unwanted along.<sup>43</sup> And as the requirements for enabling filtering increase, we can imagine that the sophistication of this filtering will increase as well.

How should we think about such intelligent agents? We have had analogs in American constitutional history that might provide a clue. These analogs were no doubt crude, but they functioned in the same way. They were orders that screened delivery of information on the basis of content. And the question the Supreme Court has addressed in the three cases that have reviewed such technologies was how broadly this screening power could be extended or facilitated by the government. Or alternatively, what constitutional principle might limit this power to screen.

The three cases that come closest to answering

this question raise as many questions as they answer. The first was *Lamont v. Postmaster General of the United States*.<sup>44</sup> The question in *Lamont* was the constitutionality of a statute that required the recipient of communist mail sent from a foreign address to indicate that he wanted to receive such mail, by returning a post card sent to him by the post office. If within twenty days, that card was not returned, then it was presumed that the recipient did not want to receive the mail, and that mail, and all similar mail, would from that moment on not be delivered.<sup>45</sup>

The Court struck the statute, but the opinion that give the reasoning its most salient twist is a concurring opinion by Justice Brennan.<sup>46</sup> While Brennan saw no problem in allowing the recipient to request that no further mail from a particular address be delivered, Brennan thought that restriction permissible only because the sender had had, as it were, one bite at the apple. Even if the individual by default didn't want to receive any communist mail, the sender had a right, Brennan's opinion suggests, to send at least one message through the mail. After that one message, the recipient could use the state to shut off further communication; but before that one chance, he could not.<sup>47</sup>

Brennan's reasoning is consistent with the second opinion arguably relevant here – *Rowan v. United States Post Office*.<sup>48</sup> The issue in *Rowan* was a regulation that permitted addressees to tell the post-office to block the delivery of indecent material in the mails. Parallel to the CDA, the statute was defended on the same grounds as the CDA: to protect children from this indecent material.<sup>49</sup> The question was whether this sort of protection (of children) interfered too much with the rights of adults.

The Court upheld the statute, but read it quite narrowly. The individual, the Court held, could block the receipt of material from a particular mailer, but only because it was the individual making the judgment about what was indecent, and

than their own).

<sup>39</sup> See, e.g., NICHOLAS NEGROPONTE, *BEING DIGITAL* 179 (Vintage Books) (1996).

<sup>39</sup> CASS R. SUNSTEIN, *DEMOCRACY AND THE PROBLEM OF FREE SPEECH* xvi-xviii (Free Press) (1993).

<sup>40</sup> *Id.* at xviii.

<sup>41</sup> *Id.* at 18-19.

<sup>42</sup> See generally Jerry Frug, *The Geography of Community*, 48 STAN. L. REV. 345 (1996) (arguing current urban policy adopted by every level of American Government promotes fragmentation of American cities, tends to isolate the poor, and fosters suspicion because fewer Americans encounter people whose cultures, values and opinions are different

<sup>44</sup> 381 U.S. 301 (1965).

<sup>45</sup> *Id.* at 303-04.

<sup>46</sup> *Id.* at 307.

<sup>47</sup> *Id.* at 310.

<sup>48</sup> 397 U.S. 728 (1970).

<sup>49</sup> *Id.* at 731-32.

because it was that judgment that stopped the delivery, and because the decision was limited to a particular mailer.<sup>50</sup> The power was to shut off further mailings from a particular sender; it could not be expanded to a power to filter all mail of the same kind.<sup>51</sup> The state could not be used to facilitate automatic filtering. The choice to filter must be made, Brennan's argument suggests, by the individual, on a per sender basis.

This disabling of government filtering gets its strongest expression in *Bolger v. Youngs Drug Products Corp.*<sup>52</sup> The federal statute struck there prohibited the mailing of unsolicited advertisements for contraceptives. The statute was defended both because it protected the public against speech most would find offensive, and because it protected kids from speech that parents might find indecent. The first ground was insufficient. The second ground was too narrow for a statute that regulated with this breadth. Said the Court:

"We [have] recognized the important interest in allowing addressees to give notice to a mailer that they wish no further mailings. . . . But we have never held that the government itself can shut off the flow of mailings to protect those recipients who might potentially be offended."<sup>53</sup>

The three opinions together support an argument that the government is constrained in its power to aid individuals in their filtering of permissible speech. It can protect the right of individuals to filter; but only when the individual first confronts what must be filtered. That burden, of making that selection, must, this view argues, be left with the individual. The evil here is governmental facilitation of *ex ante* filtering, even where the filtering is what a majority would want.<sup>54</sup> As Tribe puts it, "each householder must be left with the right to decide what messages to receive; government cannot make this choice in gross."<sup>55</sup>

This view of the first amendment is inconsistent with a technology of perfect filtering, or more precisely, with indirect regulations that facilitate perfect filtering. It is inconsistent with this kind of indirect regulation, because the essence of this view of the first amendment is that some imper-

fection is a public value. The government is limited in the aid it can give for shutting off a class of otherwise permissible speech.

The essence of perfect filtering is that the receiver be able to turn off a class of otherwise permissible speech. Given the code regulating speech now – given the technologies for screening speech now – that is quite difficult. The best computers in the world cannot effectively screen raw text, and they certainly cannot screen raw video. Thus today, perfect *ex ante* filtering is impossible. There's no way perfectly to select what one wants to see, while excluding what one doesn't want to see, except by seeing something, and then deciding not to see it again.

But a simple change in technology would change all this. As Negroponte pointed out a few years ago,<sup>56</sup> the power to regulate content hangs on whether there are labels attached to the content – whether, in other words, there is a digital truth in labeling law. If speech were required to carry such labels – accurately describing the content of such speech – then very crude machines could effect very sophisticated filtering. If all transmissions were labeled, then very simple computers could screen speech that doesn't match a selected label: Very simple computers; or very simple chips, or we could say, V-chips, for short.

Perfect and automatic *ex ante* filtering is in this way facilitated by indirect regulations that require labeling. This is just what the V-chip statute requires directly, and what the CDA requires in effect. For the CDA, like the statute in *Lamont*, says that the adult must take steps to connect to indecent speech. And the V-chip, as the statute in *Rowan* could have been read, requires a kind of labeling of speech, that facilitates *ex ante* screening. Both, again, are technologies facilitating choice, because both are technologies for facilitating perfect *ex ante* screening.

If we are to resist these technologies, my suggestion is that the grounds for our resistance are not libertarian. They are not grounds that affirm the value of freedom of choice. They are instead

<sup>50</sup> *Id.* at 734, 737.

<sup>51</sup> The Court rejected a reading of the statute which would have allowed the Postmaster General to identify the mail "similar" to that curtailed by the householder and to curtail delivery of the similar mail as well. *Id.* at 732. Under the Court's reading of the statute, the Postmaster General's role is limited to the issuance of the prohibitory order, and the prosecution for violation of the order. *Id.* at 738

<sup>52</sup> 463 U.S. 60 (1983).

<sup>53</sup> *Id.* at 72.

<sup>54</sup> Geoffrey R. Stone, *Fora Americana: Speech in Public Places*, 1974 SUP. CT. REV. 233, 262-72 (1975).

<sup>55</sup> LAURENCE TRIBE, *AMERICAN CONSTITUTIONAL LAW* 949 (2d ed. 1988).

<sup>56</sup> NEGROPONTE, *supra* note 43, at 180 ("The bits about the bits change broadcasting totally.").

Madisonian grounds, to adopt Sunstein-speak, that resist perfect choice in the name of some better balance of speech.

My point is not so much to argue for these alternative grounds. It is certainly not to predict that the Court would follow them in interpreting the First Amendment. It is instead to suggest an incompleteness in a choice based critique of indirect regulations of code. For if indirect regulations of code are not choice disabling, but choice enhancing, then an individual choice-based philosophy has no grounds for resisting them. These arguably are the effects of the current cyberspace regulations. We need something more than libertarianism to resist them.

#### IV. CONCLUSION

We have a well developed tradition for thinking about direct regulation by law. We have a large constitutional and statutory structure for testing it, and limiting it. This structure arose in a context where direct regulation was laws most effective tool: Where this was where the action was, and where this was what regulation would be.

We are entering a time when direct regulation

by government will be one of the least important modes of regulation; when the most important regulations will be regulations that are less direct. One question will then be how to carry from the old context values important in the new. Or more directly, how to limit, or constrain this indirect regulation, to achieve the values that other limits on governmental power are to yield.

This change will disorient us for a bit. It makes sense that it will. We are not used to the power that indirect regulation will offer; our intuitions were built in a world where baselines were relatively fixed. This suggests that we should gain our bearings again before speaking too boldly.

Bold speaking is what I fear about the current arguments of cyber-libertarians (such as the ACLU, or EFF). They have carried over directly real space arguments about direct regulation by law; they haven't thought through indirect regulation by code. They are pushing us to a world — indeed they are encouraging it — where automatic ex ante filtering is a feature of life. But I am not so certain that this is a feature that will make life better. And my sense is that before it gets encoded, we need to think more about what it would mean.

