

Governance

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At a conference in Georgia — former Soviet Georgia, that is — sponsored by some western agency of democracy, an Irish lawyer was trying to explain to the Georgians just what was so great about a system of judicial review. “Judicial review,” this lawyer explained, “is wonderful. Whenever the court strikes down an act of parliament, the people naturally align themselves with the court, against the parliament. The parliament, people believe, is just political; the supreme court, they think, is principle.” A Georgian friend was puzzled by this response, puppy-democrat that he is. “So why,” he asked, “is it that in a democracy, the people are loyal to the court, a non-democratic institution, and repulsed by parliament, a democratic institution?” Said the lawyer: “You just don’t understand democracy.”

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There is much talk these days about something called governance in cyberspace — much talk, followed by obscure questions, and puzzles. It is said that this idea — this idea of governing cyberspace — is anathema to our tradition. Who is cyberspace? Where would it vote? And it is said that this idea — this idea of governing cyberspace — it abhorrent to cyberspace itself. As John Perry Barlow put it, in his (maybe our?) Declaration of the Independence of Cyberspace:

Governments of the Industrial
World, you weary giants of flesh
and steel, I come from Cyber-

space, the new home of Mind. On behalf of the future, I ask you of the past to leave us alone. You are not welcome among us. You have no sovereignty where we gather.

Thus the conflict, or problem, or struggle between two views — either that there is no space there that real space could govern, or there is no real space that has the right to govern whatever space is there. And hence the problem, it is said, of governance in cyberspace.

I agree that there is a problem here. But the identification of the problem is wrong.

In my view, we have no problem of governance *in cyberspace*. We simply have a problem with governance. There isn't a special set of dilemmas that cyberspace will present; there's just the familiar dilemmas that modern governance confronts—familiar problems in a new place. Some things are different; the target of governance is different. But the difficulty doesn't come from this different target; the difficulty comes from our problem with governance.

It will take a couple passes to get to this point. It will take a couple tries, I think, before what I mean becomes clear. Passes, or stories, or ways to see the point, and then an argument to suggest just where it leads.

In the next few minutes, then, this is my plan: To begin with an account about how one should think about cyberspace, and then an argument about what follows for cyberspace, and

for governance, when one thinks just that. And finally, then, this will lead us back to this claim that I begin with here — to the claim that the problem with governance in cyberspace is only really our problem with governance.

First about cyberspace. There are those who say this:

Cyberspace is a place. People live there. They experience all the sorts of things that they experience in real space, there. For some, they experience more. They experience this not as isolated individuals, playing some high tech computer game; they experience it in groups, in communities, among strangers, among people they come to know, and sometimes like.

But while they are in that place, cyberspace, they are also here. They are at a terminal screen, eating chips, ignoring the phone. They are down stairs on the computer, late at night, while their husbands are asleep. They are at work, or at cyber cafes, or in a computer lab. They live this life there, while here, and then at some point in the day, they jack out, and are only here. They step up from the machine, in a bit of a daze; they turn around. They have returned.

They have returned, affected by what happened there. A new love in Idaho who promises to visit when the current love goes away; an on-line gambling site in Morocco, \$1000 richer; a web site in Saint Kits, that is now selling credit card data on the black market; a strange neighbor up the street, who now knows just when

Mommy goes to the store. They have returned to real space, affected by what happened in cyberspace.

And when they return, affected by what happens there, governments here take notice. They ask, have we no role in defining that space there, when it affects — when it so dramatically affects — our citizens here?

That's the first pass at this notion of what cyberspace is. Here's pass two:

If cyberspace is a space, if it is a space that affects citizens of this space, then it is a space that is constituted by code — by software and hardware that together makes up the architectures that cyberspace is; architectures that settle what's possible in a particular place; architectures that define what values will be imbedded in a particular place; architectures that determine the regulability of behavior in a particular place. These architectures are many; the values that they imbed — privacy, anonymity, access, control — are varied; and hence the choice about these architectures is a choice about these values.

There is a lot packed into that paragraph. Let me unpack it a bit. First this idea of *code*.

By code, I mean the structures embedded in software and hardware that set the terms on which one finds or experiences cyberspace. Real space, in this sense, has its own codes — at one time in our history, we spoke of them as laws of nature, though we could as easily speak of the

codes of nature, such as, for example, DNA. But in cyberspace, the sense of code is more consistent: The space one experiences there, the experiences one has there, the connections one can have there, the capabilities one has there — all these are set by instructions that were written by people who were authoring code.

This code defines the space that any cyberplace is. It determines, in a special sense but the sense I mean, its *architectures*. Think about the architecture of an office building. The designers can choose whether the offices will be separated by windows, or by walls. If the space is separated by glass, then the ability of management to control what goes on inside those offices increases; if they are walls, then the privacy of people inside those offices increases. The choice between windows and walls, then, is in part a choice about which value — control or privacy — is more important. The architect makes that choice.

The same choices, though more of them, are made in cyberspace. How one gains access; whether one can speak; how many can be in a single chat space; whether one's postings are filtered; how easily one can encrypt; how easily one can copy — these are all opportunities set by the nature of the space. And this nature is set by designers. The designers in cyberspace can't work with bricks and glass. But they do work in code.

Now there is a choice about the nature of these spaces set by code. No single design is necessary. There is no one design of the inter-

net that excludes all others. And so, because there is a choice, there is a choice among the values that the space might respect. Choice about architectures is a choice about these values.

If the architecture permits filtering of speech, that's a choice about a world where censorship is enabled; if it is an architecture that enables identification of who someone is, that's a choice about a world where people can be zoned into one space, and out of another; if it is an architecture that allows encryption, then it is one that protects privacy; if it is an architecture that transmits mouse droppings — the stuff that's produced when you click on a link — then it is a world that enables the collection of personal data. Whatever the architecture, it will imbed certain values while rejecting others. Whatever its shape, its shape has political consequences. The code of cyberspace embeds certain rules about that place; those rules matter, both to life in that place, and to life here.

This idea that architectures might embed rules troubles us lawyers. We lawyers like to think that we are the architects of rules; we like to think that it is within our domain that social policy gets made — by rules, and by laws, and the interpretation of rules and laws, where rules and laws are understood to be commands by a sovereign, directing a certain kind of behavior. So what controls speeding is a law that says “don't drive faster than 55.” Or what eliminates segregation is a declaration by the Supreme Court.

Ordinary folk don't think much like this, but I can report that we in law schools are pretty good at brain washing the ordinary or normal out of the heads of bright young kids, and turning them into the sorts that think like this. Our students step out into the world with this faith in the power of law; faith in the role law has in constructing society; faith that through reason, they might be able to make society a bit better — but only if they succeed in making the law or the rules or the text based code a bit better.

But ordinary sorts of people are struck, if they think about it, about how little law regulates. Or rather, how law is just one of many different kinds of regulators. A speed bump regulates the speed of my car more effectively than the law that says, "slow, driveway." Norms against integration, or attitudes about race, do more to regulate segregation than any declaration by the Supreme Court. The constitution might guarantee a right to travel, but the market has its own views about that freedom. The point is obvious, perhaps too obvious for anyone except a lawyer — that many forces, law being just one, regulate individuals; many forces, law being just one, constrain and enable; many forces, law being just one, determine who can do what, and when.

Among these forces in real space — among these modalities of regulation, whether law, or norms, or the market, or what we can call architecture — the one law thinks least about, I suggest, is architecture. It has not always been

so. The framers of the constitution used architecture in just the sense that I mean to help construct or assure liberty in the republic they were founding. Madison promised that we could rely upon geography to help build a national republic. Because, he said, interests would be so many, yet so diffuse, we would not have to fear factions taking control of our government. And that's just the most famous of examples. Others are even more explicit — it is no accident that the White House, for example, was placed a mile from the Capital, with a swamp dividing the two, so that the one branch of government could not control the other, or that the original Supreme Court was placed inside the Senate — for a different purpose.

Nor was this idea of using architecture to regulate limited to the United States. Town planning for our forefathers in England was a political art; it was about organizing villages and cities in a way that would support English liberty. Napoleon understood the same point, but to a different end. He razed the tiny side streets of Paris to turn them into boulevards, so that rebels could not foment revolution any more. These are all examples of using architecture in the sense that I mean to advance certain important political values. They are all examples of arranging space in the world so that space effects a kind of constraint, or enables a kind of interaction, that those who control the space want. They are effective, in this sense, at regulating people in those space. Yet we, as lawyers, think little about the significance of such regulation.

We can't anymore. We can't, as lawyers, or as citizens, ignore or discount the way in which space will regulate. We can't ignore it because of all the ways to regulate in cyberspace, it will be architecture that will be the most important. The architecture of the space — how it appears, how it is, what constraints its code builds in, what connections it make possible, what accountability it enables, what anonymity it allows, all these are enabled by architectures constructed by code, and choices about them are examples of regulation by architecture. All these are examples about how cyberspace will regulate life in that space. If life in that space affects life here, then it will be because of the architectures of that space.

Put these two passes at the problem together. In the first I said that while cyberspace was a place, while one lived life there, how one lived life there affected life here. One was always in both places at once; one is never just there.

And in the second pass at the problem, I said, following Kapur and Barlow before me, that what constituted life there, what made it as it was, and hence what affected behavior here, was a set of architectures or code that would define cyberspace as it is. These architectures are many; we could imagine them as very different; if they were different they would constitute a different space; if the space were different, it would affect real space differently.

Now when we put these two point together, we can say this: That it is the architectures of cyberspace that will determine how life here is affected; but since these architectures are not given; they could be different; they could affect life here differently; and so again we could ask, shouldn't real space governments have an effect on how these architectures will be? Shouldn't life in real space have standing to say something about how those architectures will affect real space life?

It is as if the laws of nature were being written; it is as if they were being written as we stood by and watched; and as if we could see how these laws will affect us — affect us more completely than any laws of man — yet we still wonder, or ask, should we have a role in this writing? Or should we have a role in this writing when we can see so clearly how it will affect us?

Now the odd thing about this question is that it has an obvious answer, but it is not the answer most of us would give. That is, if one describes an activity that is having a dramatic effect on social policies in real space, and then one asked, shouldn't those who set social policy take account of this dramatic effect, one would think there would be little thought about the question. *Of course* those charged with setting and preserving social policy should take account, and possibly regulate, that which is undermining policy in real space.

One would think this would be the answer, until one asked the question about cyberspace. For though our general thought is that government should regulate in the interests of social policy, most of us would say that here the government should stay away. Most resist the idea of governance here — both the idea of government affecting what goes on there, and the idea of government there.

I want to understand why. I want to understand why it is that the obvious answer to the emerging power of cyberspace is that we all, here, should just stand by. I want to see what it is that drives us — me included — to the conclusion that best if we do nothing, best if we just let things go.

Now part of this intuition — that we should let things go — part is pure pragmatics. We don't know enough to know what things will develop. Let's stand back and watch.

This part I have no problem with. Of course we should not wrongly anticipate; and much of the worst legislation around is legislation of the early bird.

But it's not pragmatics that is my focus here. I mean a deeper sense of *laissez-faire*. A deeper view that connects Barlow's rhetoric with the thought of most of us, that nothing would be worse than to imagine the government regulating here. What is that thought about?

For the fact is that we modern democrats from our well-developed representative democ-

racy, we, you and I, we, the Irish I spoke of at the start — we who otherwise sing of the virtues of democracy and freedom and control by the citizen, we have no faith in what we might do. We are at a time when the most important judgments about how this new world will be made are being made. And yet, we are strangely disabled — immobilized by ourselves — from making choices about that new world. Laws are being written in the code that that space will be, yet we have no idea how we might participate in the writing of those laws, and little desire to do so.

We are disabled, I suggest, for a number of very different reasons. Some are quite local, particular to lawyers; limitations in the way we lawyers think about the scope of public, or more precisely, constitutional law; the balance are quite general, a symptom of modern democracy; our strangely Irish aversion to the products of democracy; our exhaustion, or resignation, with how democracy works.

I want to address both here, considering first the point about lawyers.

So far I've argued this: Architectures constitute cyberspace; these architectures are varied; they variously imbed political values; and obviously, some of these values have constitutional import.

Yet for the most part — and thankfully — these architectures are private. They are constructed by universities, or corporations; they are implemented on wires no longer funded by the

defense department. They are private and therefore, under traditional views about the reach of constitutional law, they are outside the scope of constitutional review. Traditional constitutional values of privacy, or accountability, or rights of anonymity, or equality — these values need not trouble this new world. What the market will provide, what contract will demand, what doesn't get waived by a click wrap agreement — these are the things that determine values in these new spaces. Not a tradition of constitutionalism; not a requirement of justification for deviation from those values; but rather simply present day expediency — what seems to work now.

Why this should be is not at all clear to me. This separation comes from a tradition of separation in real space constitutional law. In real space, we say — we lawyers, who've found ways to cabin our constitution to the smallest space possible — we say that the constitution reaches state action only. That it restrains the government only. That it doesn't reach private behavior — at least not private behavior not sponsored by government. We say that even though there are parts of our constitution that seem to speak to the people directly. But put that aside for a moment — our tradition in real space constitutional law makes a fundamental distinction between public and private action. And the constitution, it is said, reach just the public.

I'm happy to concede, for the sake of argument, the claim about real space — I have my

quibbles about it, but I'll put those aside for the moment. What I don't get is why people think the same conclusion — the same conclusion about the limitations on the scope of constitutional norms, or constitutional value — is so obvious when applied to cyberspace. Of course there is some limit to what the constitution requires; of course the constitution doesn't apply to every individual action. I understand why we don't think it applies to my decision not to read emails that are spam, or my decision to discriminate about the views I pay attention to. I understand, that is, why "really private" actions are not the stuff for constitutional law.

But "really private actions" are not all that is happening in cyberspace just now. World building is going on. Spaces are being structured to give access or not; to protect privacy or not; to enable connection or not. This world building is not "really private" action; is not the individual acting by himself. This world building is much more than "really private" action. Why shouldn't it be treated as something more?

Or let me make the same point a bit more precisely. In real space, we say that constitution controls the actions of governments and not the actions private individuals. I'm conceding that real space division is just fine. But the actions of government and the actions of individuals take for granted a certain world within which these actions occur. They take for granted a geography, a certain resistance that nature gives to our efforts at mastery, and they act against these taken for granted.

Now imagine in real space that some company — call them BBN — discovered a way to change the laws of nature. To make distance disappear, or make communities function differently, or make interaction or commerce radically different. How would we think about this kind of power?

Well, of course, BBN would be a private actor, but it's not as if its actions are really the same as what I was calling "really private." It isn't really acting within a context that both government and individuals take for granted; it is changing the very nature of that context. It isn't just taking the architectures of the world as she finds it; it is radically transforming those architectures.

And the question should be, how should we treat such change? Where it is not simply a matter of carrying over our old rules about what is private and what is not — when we have a case where the very nature of the private and public is morphing, a case where the private is restructuring the very terms upon which the public, and private, will interact — how should we carry over our old world views.

This of course is the story of cyberspace. As we build this new space, we are building a new world; and how we build it; how we lay out its space; will determine the values of this new world. It is so far greater a change than any equivalent real space change that it is hard to see why we should considering it immune from the values of our constitutional tradition. Nothing compels that we do; our values are im-

portant enough to respect; so why shouldn't this emerging world be tested against these values? Why shouldn't public values have a role in defining the nature of this space?

Well, what kind of role? I'm obviously not talking — I hope this is obvious — about the government taking over the coding of the net. I think it would be disaster for the government to become codewriters; and I certainly don't believe that every action in building this space should raise a constitutional question.

But I do believe this emerging architecture has a fundamental effect on constitutional law, and that constitutional law should have something of an effect on it. As it will affect what is constitutionally permissible, so, too, should the constitution guide us in determining how it should be. And as I am certain that most of you will agree with the first part — that the emerging architecture will affect what is constitutionally permissible — I am at least hopeful that I can convince you of the second part as well — that the constitution should affect how we build cyberspace.

First things first: This organization has been keenly interested in outlawing the FCC. You are about to get an amazing new weapon in that battle.

The FCC regulates speech. It says that if you want to speak on 98.6 in Boston, you must get a license. If you speak on 98.6 without a license, you will have committed a crime. The FCC will prosecute you and seize your trans-

mitter. All this despite the fact the First Amendment to the constitution says, “Congress shall make no law ... abridging the freedom of speech.” What gives?

The traditional answer goes something like this: 98.6 is part of the radio spectrum; radio spectrum by its “nature” must be allocated to be useable. Two transmitters can’t use the same channel, and so someone must say who gets to use which. Since 1927, the FCC has had that authority (first through the practice of licensing spectrum, and more recently, through the practice of auctioning). But whether through licensing or through auctioning, the government must, the argument goes, organize and police the parceling out of the spectrum commons. We have, it is said, no other choice.

This is the architecture of “allocated spectrum” and this architecture has in turn has justified massive involvement by government in the distribution of speech sans wires. Nature makes it so, the government says; and governments have no choice but to respect nature.

But nature is about to change. A growing body of researchers, using a variety of broadcasting strategies, the most radical of which is spread spectrum technology, are now showing that in fact, spectrum doesn’t need to be allocated. Rather than licensing 98.6, or even auctioning 98.6, to a single owner to use as it wants, spectrum could be shared in the way the internet share its resources. Just as packet-switching replaced circuit-switched telephony,

multiplexing, these researchers argue, could replace traditional broadcasting and wireless techniques. And just as TCP/IP tell packets on the Internet where to go, and how not to get mixed up or interfere with packets carrying other peoples messages, multiplexing technologies could use one of a number of protocols to avoid collision and congestion in wireless communication.

Now thew implications of this research are profound. Instead of defined frequency ranges over which someone — a licensee or an owner — gets to decide who communicates what, and to whom, the government would permit anyone using certain kinds of equipment (basically a computer with a wireless modem) to send and receive whatever he or she wants, over broad swaths of spectrum. Instead of a market in spectrum, we would have a market in efficient wireless modems. Instead of the government and a small group of companies dictating how wireless communications will be used, we would have every user deciding for her- or himself whether to use a computer to talk to a friend, watch a movie, or play an online game. Instead, in other words, of a few railroad companies deciding who gets to go where, and when, people would buy cars and go wherever they wanted to go.

If these scientists are right — if spread spectrum technologies were even roughly equivalent to the architecture of allocated spectrum — then, as my colleague, Yochai Benkler and I have argued, the present broadcasting ar-

chitecture would be rendered unconstitutional. In other words, if shared spectrum is possible, then the First Amendment would mean that allocated spectrum — either licensed or auctioned — must go.

The constitutional argument goes something like this: The First Amendment protects the freedom of speech and the press; it is strongly opposed to a system of licensing, or prior restraint. The “press” the framers had in mind was not the New York Times; the press of 1791 was a jumble of small printers and pamphleteers — in short, the internet of their day. Economics has gotten the better of this original pamphleteer press; concentration has replaced diversity. And there is little the constitution can say about the consequences of such economic rationalization.

But the constitution does have something to say when the concentration comes from state-sponsored monopolies, and state prohibitions on competing speech. When the state creates a regime where all speech must be licensed; when it establishes monopolies over valuable speech resources; when it architects a framework that concentrates, rather than decentralizes, opportunities for speech, then the state needs a very strong justification for its actions.

Necessity would be such a justification. If the only architecture for broadcasting that could work were the architecture of allocated spectrum, then spectrum allocation would be justi-

fied. But when technology advances such that this soviet architecture is no longer required, then that “necessity” disappears. And when the reason for this state sponsored monopoly — abridging the freedom to speak without a license from the state — vanishes, then broadcasters need new reasons to justify their state supported monopolies. And while there may be such a justification, I’m not sure I see it. The reality, I suggest, is this: Once the architecture of cyberspace makes spread spectrum possible, broadcasting as we know it must, according to our constitution, change.

But that’s the easier of the arguments — or at least the easier of the arguments to make here. Now I want to try an argument that will be a bit more difficult. For now I want to claim that just as technology tells us what is constitutionally permissible, the constitution should tell us something about what technologies are constitutionally permissible.

Here’s the argument: One way to understand the significance of the emerging architectures of cyberspace is to see that they are functioning as a kind of law. They are a privatized law, and at times more efficient than law, but we’ve seen enough to know that they regulate, that they impose or enable values as they regulate, and that these impositions or values are the product of someone’s choice.

Now if our objectives, as a society, are to protect ideals such as liberty, then my claim that we should focus on liberty, and not so

much on these obsessively legalistic distinctions about who or what is responsible for an absence of liberty.

This is a very old thought. John Stuart Mill, for example, was keenly concerned with Liberty in Great Britain. But his primary concern was not the liberty threatened by government. Mill's primary concern was with social norms, or stigma, that functioned to erase personal liberty. His book, *On Liberty*, was a corrective — not just to excessive government censorship of ideas and speech; but to excessive private censorship of ideas and speech. He argued for a world where liberty was protected from both the threats of private and public action — from both laws and from norms. For him the value was liberty; and his method directed him against threats against liberty, whatever the sources.

Mill's method should be our own. We should ask whether freedom is protected, not just whether government threatens freedom. We should ask whether the architectures of cyberspace protect traditional values of liberty, and speech, and privacy, and access — not just whether government is interfering with liberty, and speech, and privacy, and access. The primary good here is a set of values, not absence from governmental interference independent of those values. And quite often — more than the libertarians seem keen to admit — these values are only protected by a government acting — acting against tyrannies imposed by individuals, and by groups.

Let me give two examples of this point, the second more pressing than the first, and hence the first less extensively than the second.

The first is the debates about censorship on the internet. When Congress passed the first CDA, activists were outraged at the idea of government regulating speech on the net. So they fought the CDA, to fight, they said, the “regulation of speech on the internet.”

But some of those fighting the CDA weren’t fighting the idea regulation. They were just fighting regulation by government. In place of the regulation by government, they offered a regulation by code — software that would enable filtering and blocking of content on the internet without the intervention of government.

Now I have nothing against using code to regulate when it will work better than law. But we must evaluate the politics and consequences for speech implicit in the code we select, just as we evaluate the politics and consequences for speech implicit in laws we select. And if we did so here, we would see — as activists such as the ACLU came to see quite quickly — that the consequences for speech from some of this regulation through code were worse than consequences for speech from some of the possible regulations through law. We were choosing between two modes of regulation — not between regulation or not — but in this choice, only regulation by government got put to the test.

But my second case is the more troubling, and more current, and potentially more significant. This is the emerging debate about laws to protect intellectual property in cyberspace. For here, I suggest, the blindness that I am describing is most pronounced. And here we need to begin to engage with those who speak with such blindness.

There are presently a gaggle of proposals floating about in Congress broadly aimed at protecting what we might call intellectual property — both copyright, and recently, data bases. In both cases, the story is the same: The stuff that is protected by copyright law, as well as the stuff that should be protected by copyright law — databases, or anything produced by the “sweat of the brow” — need more protection in cyberspace than in real space. The reason, it is said, is obvious: Anything digital can be copied perfectly; transmitted almost costlessly, and therefore stolen extremely easily. So Congress needs to increase the protection for this material; otherwise this “property” will become worthless; stolen; lost; and a crucial American industry, undermined.

Now I think that most of this story is just wrong. It is a mistake built upon a fundamental error about the nature of intellectual property, and our constitution tradition of support for it. For though we use the word “property” to speak of intellectual property, and though those who construct databases want to use “property” to describe what they have built, the fact is that we have never treated “intellectual property” with

same sort of respect that we treat “real property.” And more importantly, there is all the reason in the world for this difference in respect. It is neither our constitutional tradition, nor sensible economic or social policy, to grant holders of intellectual property the same amount of control and same power to exercise control, over their “property” that we give to holders of real property.

There’s an argument of economics that yields this conclusion, and an argument from our constitutional past. I did economics for too many years, and have grown a bit bored of it, so suffice it if I give you the argument from our constitutional past.

Our framers understood this about IP — that it was a state granted monopoly. A copyright is a monopoly of control over the use and distribution of a particular work, granted, and protected by the government. Now in the main, our framers were conflicted about monopoly, but their strong baseline was against them. Monopolies were to be looked upon with skepticism; state policies were to be crafted to minimize their significance; we should try to eliminate as many as we can, so that competition for ideas and resources can be strongest.

Thus the framers built into our constitution a protection for copyright, but that protection was limited, or conditional. The right was not to be absolute — indeed, it was constitutionally prohibited from being absolute. As the copyright clause states:

Congress has the power ... To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors exclusive Right to their respective Writings and Discoveries;

Things are different with the power to protect ordinary property rights. One doesn't get a property right to "real property" for a limited time. The state doesn't grant it only to the extent necessary to give an incentive to produce it. With ordinary property, you get what you buy; and if the state later wants to take it, they have to pay you. But with IP, the right not absolute. The right is granted for a limited time, and then the property becomes the property of the public.

Our Congress seems to have forgotten all this. In the last generation, we have seen a radical increase in the protections the law gives to copyright holders (perhaps just coincidentally with the rise of political power in Hollywood). Though the constitution speaks of securing rights for a "limited time" Congress continues to increase the length of copyright protection. (Mickey Mouse.) And though the power speaks about protecting Authors and Inventors, it's not really authors and inventors who hold or benefit from these IP protections. The copyright clause has become the single greatest source of monopoly power in America today, and there seems no end to Congress' appetite for increasing it.

The recent database protection bills are good evidence of this continued insatiability. In 1991, the Supreme Court held that copyright clause did not extend to the protection of databases. Databases were not “original” and the copyright clause required originality. The Court hinted that it would be unconstitutional for congress to protect databases, but that was just a hint. Now congress, ignoring this hint, has proposed a statute that would essentially give databases the protection — indeed I think more than the protection — that the copyright clause give copyrighted material. Information, under this statute, can become the private property of the collector of the database; and massive new monopoly rights would then be created.

The administration apparently gets this. In an extraordinary letter to Senator Leahy, the administration has warned that there are serious constitutional questions raised by this effort at propertizing databases. That the first amendment, as well as the copyright clause, place strict limits the monopoly gifts that Congress is allowed to dole out to its contributors.

This letter from the Justice Department is, in my view, the most hopeful sign that this debate is changing. It is the most significant, and sensible, view on this debate that I’ve seen in sometime. It is not arguing against protection. Indeed, no one is arguing that databases, or copyright, deserve no protections. Of course there is a need to provide some protection to assure adequate incentive to produce copyrighted or database material. But the question is

whether we should, or whether the constitution allows us, to create perfect protection for IP, or database material. For again, our tradition is not perfect protection; our tradition is balanced protection.

But even this letter doesn't go far enough, in my view, or at least, it doesn't go far enough in identifying what the real issues here will be.

For the real mistake in this debate about IP is the assumption that in cyberspace it is harder to protect copyright than in real space. The real mistake is to think that cyberspace demands more protection than in real space. It doesn't.

For in fact, copyright, and IP, in cyberspace is much more effectively controlled and protected than the same in real space. The potential in cyberspace is for a system of perfect control of IP in cyberspace. Far from the end of copyright, the code of cyberspace could be such that copyright, or the rights now protected by copyright, is protected far more extensively than the same rights in real space.

How could this be?

Well again, it all depends upon the code. The code of cyberspace just now permits endless and cheap copying. That's the reason copyright holders fear it. But as we speak, there are literally dozens of companies that are developing what Mark Stefik of Xerox PARC calls "trusted systems" — architectures for protecting IP that would give IP holders perfect control

over the use and distribution of copyrighted material.

The details here are complex, and the model that will emerge is uncertain. But what's important is to think about the relationship between the protections that law gives copyrighted material, and the protections that code could give copyrighted material. For again, the law gives only a conditional protection. Copyright holders get their rights for a limited time; these rights are subject to public use exceptions, such as fair use; there are very specific and definite limitations to the use of these rights.

But if the rights of copyright were protected not by law, but by code, then there is no reason to expect that any of these limitations on the copyright holders' rights will obtain. If Stefik offers a system that builds fair use, or limited time to protect material into his code, then someone else will offer a system that gives the IP holder unlimited rights, and no duty to provide fair use.

Code in this story become a substitute for law; privatized law. The architectures displace the policy choice of real space law; they displace the choice and give copyright holders far greater protection than the law ever did.

Now you might not believe this will happen. Okay, my aim is not to predict. I just want you to ask yourself, what if something like this happens? What if the architectures of cyberspace — themselves a kind of law — displace real space law. What if they displace real space law

with a law that real space sovereigns think is detrimental to, for example, liberties of free speech? Should we simply accept the normative universe given to use by the architectures of cyberspace? Does anyone really think we should just stand by as real space life gets remade by the structures that the invisible hand deploys in cyberspace?

My sense is that in the abstract, most would agree that we should not just stand by. Cyberspace affects life in real space; it affects life in real space through the architectures that constitute it; and we, my argument has been, we should be fundamentally concerned with the nature of these architectures, and the they protect. Like Mill, our question should be whether liberty is protect, not just whether government is invading liberty.

But then what explains our hesitation? What explains the fact that we are reluctant to think about how code regulates? Why is it that we seem willing to give this lawmaker — the codewriters — a free pass?

What explains this time, when we seem to treat certain spaces, or influences, as sacred? When market structures are presumed rational and all else questioned. And where any effort to extend the self-conscious reach of government is resisted, as either illegitimate, or unwise.

How is it, that when we are building the most significant new jurisdiction we've known

since the Louisiana purchase, we build it just outside the constitution's review? How is it that we are building it so as to assure that the constitution will not govern?

The reason, I suggest, is Irish. It is this skepticism that we all bring to question of collective governance. It is our unwillingness to think about how “we” should influence this space; our preference just to let the space take care of itself; because we have so little faith in any structure of collective control.

I share this skepticism; I am not a naïve New Dealer; I don't have a 100 day plan for regulating the internet; most of the regulation that I have seen I abhor. But what I find interesting — and the point I think we should focus — is why we have such skepticism. What is its nature; what accounts for its source? Why are we, like the Irish, exhausted by government? Why does government seem like the solution to no problem that we now have?

I don't believe that our skepticism about governance is a point about principle. We are not, most of us, really libertarians. We may be anti-government, but for the most part we do believe that there are collective values that ought to regulate private action. We are, in the main, as my friends like to call it, techno-realists¹ — committed to the idea that collective values should regulate this emergingly technical world.

¹ See <http://www.technorealism.org/>.

Our problem is that we don't know by whom, or how. We, like the Irish, are weary with governments. We are profoundly skeptical about the product of democratic processes. We believe, whether rightly or not, that democratic processes have been captured by special interests more concerned with individual, than collective value. So while we believe that there is a role for collective judgments, we are repulsed by the idea of placing the design of something as important as the internet into hands of governments.

The White House's recent domain name proposal is a perfect example of this very point.

To regulate the policy for domain names — those mnemonics that get tied to internet addresses, and that distinguish .com from .org, or .us from .tm — the White House has proposed the creation of a non-profit corporation, devoted to the collective interest of the net as an international whole, with a board to be composed of representatives of stakeholders on the net, and charged with making essentially the policy judgments that IANA had made. In exchange, the government will give up continuing control over the domain name system, and support its transition to an autonomous, separate entity.

Now I think there is great merit to this proposal. There are parts that trouble me, these, in the end, are really just quibbles. For I agree that the general structure — of a private, non-profit corporation devoted to the public interest — seems right.

But think for a second about the kinds of questions my Georgian friend might ask. A “non-profit corporation devoted to the collective interest”? Isn’t that, he might ask, just what government is supposed to be? A board composed of representatives of stakeholders? Isn’t that what a Congress is? Indeed, if he thought it through, my Georgian friend might observe that this corporate structure differs from government in only one salient way — that there is no on-going requirement of elections. That this board fits the model of democratic government — interested in the public, separated from profit — and is engaged in important policy making functions, but crucially, all outside of the democratic process. The board is the delegate of policy making power, but it is a debate that has no ongoing responsibility to voters.

Now again, I like the proposal, but isn’t there something a bit odd about the idea? And doesn’t it say something interesting about us? Imagine we established a non-profit corporation to make highway policy, with the board members initially chosen from the stakeholders of highways, and then given the authority to set policy from that moment on. And if the highways, why not the telecommunications industry in general. And if them, why not the air transportation industry. Why not, someone might ask, just carve up the government into so many private nonprofit corporations, and be done with it.

Putting aside the constitutional questions of this for a second, my point is just how bizarre

this is for a democracy. What does it say, when not even the government imagines creating a governmental body for making policy decisions for the internet.

What it says, I suggest, is something important about how we now view government — we, modern inheritors of this system of representative democracy. It reflects a pathetic resignation that most of us feel about the product ordinary government. And while I completely share that skepticism, and sometimes disgust, I think it is important to notice how infectious it has become. We have lost faith in the idea that the product of representative government might be something more than mere interest; that, to steal the opening line from Justice Marshall's last opinion on the Supreme Court, power, not reason is the currency of deliberative democracy.² We have lost the idea that ordinary government might work, and so deep is this thought that even the government doesn't consider the idea that the government might actually have role in governing cyberspace.

Good that it didn't, I say again. I'm with the Irish, and against the parliament. But we should not miss — we, who live our life using reason rather than power to persuade others, we should not miss — what this loss really means; what this says about our intuitions about governance.

² See *Payne v. Tennessee*, <http://supct.law.cornell.edu/supct/html/90-5721.ZD1.html>, Marshall, dissenting.

In a critical sense, it says, we are not democrats anymore. Cyberspace has shown us this, and it should push us to figure out why.

And it should push us now. For the fact is, we don't have time for this skepticism. We can't afford this resignation. We are too old for this childishness. There is a reality we must face. The fact is, there is a governance question about how cyberspace will proceed, and doing nothing is not to avoid the question. Doing nothing is just one kind of answer to that question — an answer, but certainly not the best answer.

There is a reality to the space that cyberspace is. A reality to what it will do. And an increasing reality to the fact that we are citizens of that space, just as citizens of this.

I want to end tonight by pushing the importance of this problem. I want to end by getting you to see just why it is so significant. Just why we can't help but confront it, and why we need to work to assure we can.

In rightly famous book, Senator John F. Kennedy tells the story of Daniel Webster, who in the midst of fighting a pact that he thought would divide the nation, said on the floor of the Senate, "Mr. President, I wish to speak today, not as a Massachusetts man, nor as a Northern man, but as an American."

When Webster said this — in 1851 — the words "not as a Massachusetts man" had a sig-

nificance that we are likely to miss. To us, Webster's statement seems perfectly ordinary. Who else would Webster be, except an American? How else would he speak? But Webster's words come on the cusp of a new time in America. They come just at the moment when the attention of citizens in the United States is shifting from their citizenship to a state, to the question of citizenship for the nation. Webster is speaking just when it becomes possible to identify oneself separate from one's state; as a member of a nation.

For at the founding, citizens of the United States (a contested concept itself) were really citizens of particular states first. They had loyalty and connection to their own states first, because that's where they lived, and their life was determined by that. Other states were as remote to them as Tibet is to us — indeed, it is easier for us to trade with or go to Tibet than it was for a citizen of Georgia to visit Maine.

Over time, of course, all this changed. In the struggle leading up to the civil war; in the battles over reconstruction after that war; in the revolution of industry that followed that — in all this, the sense of individual citizens as *Americans* grew. In all this, in all the exchanges and struggles which were really national, a national identity was born. When citizens were engaged with citizens from other states, only then was a nation created.

We need to see that today, we stand just a few years before where Webster stood in 1851. We stand just on this side of being able to say,

“I speak as a citizen of the world,” without the ordinary person thinking “what a nut.” We stand just on the cusp of an existence where ordinary citizens come to know how the world regulates them. Where ordinary citizens begin to feel the effects of the regulations of other governments, as the citizens in Massachusetts came to feel the effects of slavery, and the citizens in Virginia came to feel the effects of a drive to freedom.

As we, citizens of the United States, spend more of our time, and spend more of our money, in this space that’s not really part of any particular jurisdiction, but subject to the regulations of all jurisdictions — as we spend more time there, we will increasingly come to ask questions about our status there. We will increasingly feel the entitlement that Webster felt, as an American, to speak about life in another part of America, but for us, it will be the entitlement to speak about life in another part of the world.

What will we do then? What will we do when we begin to understand that we are part of a world, and the world regulates us? What will we do when we need to make a choice about how the world regulates us, and how we regulate this space?

My sense is that what we will do is just what we are beginning to do now, with the creation of this private, nonprofit corporation dedicated to the public interest. What we will do, that is, is create bodies to govern.

And when we build these organizations, we will then have to ask— what values will they have. When we vest them with the authority to structure the net and its nature, we must ask — how will it be different from government today? How will it be better? How will escape the resignation, the cynicism, the skepticism, and the disgust that most of us now reserve for government today?

I mean this as a genuine question, not a law professor's question. I mean it as a citizen of the United States. I mean it as one who is tired of the politics of the ulterior motive; who dreams of a time when something other than Hollywood inspires. I mean it not as one who has any real answer, but who, having seen the questions that cyberspace will press, knows, that we, as a people, will need an answer very soon. It is not as if cyberspace will not be governed, by its code at least; the only question for us is whether its governance is something for which we will take responsibility.