

# Building Tools for Edge Based Control Understanding Edge IPv6 versus Backbone IPv6 VoIP and Vonage - When Customers Become Competitors Open Spectrum Versus the Spectrum-as-Property Worldview

We are finding more evidence that the phone companies are caught in an undertow from which they cannot escape - unless the FCC and, or Congress does something truly idiotic like grant them a monopoly on fiber to the home. "Grant them complete control over the glass and then they will invest" will run the tired argument. The first problem is that they have pledged this before and done nothing. The second problem is that if they were given yet another opportunity there is and will be no enforcement for any of the pledges they make.

To borrow the metaphor from the 19th century, the result of granting them a fiber monopoly would be to hamstring the entire American economy into reliance on "canals" in order to scare off this new and chaotic world called "railroads." While other countries are building "railroads" - that is broadband - for us not to do so would irreparably handicap what is becoming one of the most basic infrastructures of a modern economy. We are already behind. The Organization for Economic Cooperation and Development (OECD) ranks United States only 17th in utilization of communication services. [Quoted in Feb 1 Pulver.com letter to FCC Chairman Powell.]

But fiber is fast you say and speed of connection is the issue – not control over access. What is wrong with such a scenario? Well consider the ZAP mail experience as written by Clay Shirky on

January 7, 2003. http://shirky.com/writings/zapmail.html What is wrong here is not speed of connection but rather control over the technology. The phone companies cannot see the world in any terms other than those of control.

#### A Matter of Mindset -- ZapMail and the Telcos

Consider what happened to the hot new company Federal Express in the early 1980s. There was this new fangled device called a fax machine that scanned a document and sent the resulting digital bit map over a phone line. The time was just before the split up of ATT and the explosion of customer premises phone equipment. Fed Ex totally missed what was happening. Thinking that its competitors were the other over-night delivery companies, it spent 200 million dollars in an attempt to one-up them by buying expensive new fangled fax machines and building a dedicated phone network to run them on.

As Shirkey writes in his essay, they failed to see that the breakup of ATT and the consequent opening of the network would allow their customers to buy their own fax machines and by being able to use the PSTN, become their competitors. They underwent a huge build out for a business that wasn't there. With the network opened up, Fed Ex's customer bought thousands and then tens of thousand and then hundreds of thou

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sands and eventually millions of fax machines. Rather than rely on Fed Ex for the faxing service, Fed Ex's customers bought their own fax machines and did it for themselves. Today rather than rely on centrally controlled circuit switched technology, increasingly large numbers of phone company customers are taking telecommunications into their own hands.

It is a simple matter of economics. The cost of communication via IP is but a fraction of the cost of doing it the phone company way. In our January-February issue we saw how the large corporate enterprises are beginning to pull their voice service from the PSTN. issue examines why Ipv6 is unlikely to ever be significantly deployed in backbone of the Internet. It also will show how IPv6 deployed at the edge of the network, in the hands of the end user customers of the phone companies, could do a great deal to redress the ongoing consolidation of power into the hands of the central control minded tel-

#### On the Inside Tools for Edge-based Telecom

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cos and cable companies.

We have been learning a lot more about the technology of VoIP. In our April issue we shall return to VoIP and shall show how new developments are already beginning to lower the artificially high costs of international phone tariffs. We anticipate writing about the technology and mechanics of the use of VoIP on a global basis as a substitute for expensive circuit switching. The cost spread between international circuit switched calls and VoIPcalls which can be routed from one part of the PSTN to another is now so huge that it has spawned a global grey market. In part because so many people are so busy making money from it, this

grey market has never been discussed in detail in the press. Beginning with our April issue we shall do so.

The stark fact is that the blades of the VoIP scissors are closing in on the telco's cash flow. On the one hand one blade is the result of large corporations withdrawing voice traffic from the PSTN and running it over their corporate IP networks. On the other hand the other blade is derived from international VoIP wholesaling by companies like ITXC and activities by thousands of phone card middle-men hammering long distance rates ever downward. The ability of the phone companies to charge more for a minute of voice traffic than

they could for a minute of data traffic is rapidly diminishing. Recently the difference has been as high as seven to one. That is if a telco could make a penny for a minute of data transfer, it could make seven cents for each minute of voice transmission.

For the most part the seven-cent differential is no longer there. Bits are bits. One cannot really distinguish voice from data bits. That any price difference exists at all is increasingly a regulatory artifact. In two or three years market and technology pressures will have driven the differential to zero. When this point is reached, the telcos could find their revenues slashed by two thirds. They will

### Governance by Lawrence Lessig

# Lessig Demonstrates How the Would Be "Self Regulators" Took Control - Part Two of How ICANN Came to Be Highlights

Editor's Note: Larry Lessig in the document that follows gives the best overview that we have seen of the details under girding ICANN's construction in the year 1998. In the talk that we republish with his permission, he shows how the GIP ISOC Clique found in Joe Sims an attornev who enabled them to take advantage of libertarian distrust of government to create an ICANN that they could use for their own narrow ends and brought on four years feuding and distrust. ICANN from the very beginning was broken. Such was the distrust of government that no one would own up to seeing the brokenness. Lessig saw it however and his analysis of what could be expected from ICANN from the position of hindsight more than four years later reads like prophecy.

#### Governance

CPSR Conference on Internet Governance, October 15, 1998 http:cyber.harvard.edu/works/lessig/cpsr.pdf

"The single unifying force is that we don't want the government running things."1

For the past year or so in earnest, and for some time before that, the government has been scurrying to find a way to pass off its role in running the domain name system to a private, nonprofit corporation. It has been scurrying because its contracts with Network Solutions and Jon Postel's IANAwere about to run, and because the theme of the day for both Democrats and Republicans seems to be that government cannot run things.

"The single unifying force is that we don't want the government running things."

The history of this recent privatization of

governance is important; the facts are important. For they should drive us — this history, and the facts it tells — to relearn something our grandparents learned half a century ago. They should drive us, that is, to understand what government is for. To understand government's role not as some unnecessary appendage — the appendix of society, waiting to be excised by an overeager surgeon — but as an institution that makes possible a certain perspective on social life

We have lost this idea, we inheritors of the 21st century. We have lost the ideal that there is a role for government here. We — especially we who spend too much of our life using electrons to interact; we — especially we, who still stand amazed at the potential of this wired world; we - especially we, who can't remember a time when there wasn't an underbelly to every story about a hero. We — children of David Lynch, who can't help but believe that, just underneath the surface of the sensible, there is a decay that can't be avoided. We listen to the promises of our governors no differently than Soviet citizens listened to the promises of their governors. We, like Soviet citizens, have heard it before. "Hope" is not a place; "Hope" was a television commercial.

In the few minutes that I can ask for your attention this morning, I want to think about this fact about us. I want to think about this reality that all of us know — whether Republican or Democrat, whether political or not. I want to think about its meaning. For we are at a moment of history where hope would come only if we could get beyond this despair. We are at the cusp of a moment when collective judgment should matter. But we are disabled from making that judgment; we are convinced no such judgment; we

ment could be made. And so we resign ourselves to the religion of antigovernment — to this absurdly naïve thought that if we just privatize everything, all of our problems will go away.

"The single unifying force is that we don't want the government running things."

Now to my surprise, as I've talked about this subject of the new corporation that will govern domain names, I've discovered that not everyone is following the details of this story. Apparently the puritans enacted the Impeachment Clause of the United States constitution, so until that public flogging is finished, no serious attention in the nation can be spared for other public issues.

So let me review some of the facts, and retell some of the story, of this process that has led us to the place we are today.

As I said at the start, for about a year now the government has been shopping in earnest for a way to remove itself from Internet governance. It had at the start, through the funding of NSF and DARPA, supported the work of sometime god of the Internet Jon Postel in California, and then approved the contract with (what has become) NSI of Virginia to govern between them the allocation of top level domains. NSI holds the keys to four of these TLDs — .com, .org, .net, .edu; the balance was coordinated by Postel at USC.

But as the net grew internationally, and as questions were raised about this state-supported monopoly, the government decided that it was better simply to step aside. And so just a few months ago, the Commerce Department released a "White Paper" that called for the creation of a private, nonprofit corporation dedi-

cated to the interest of the net as a whole. The government, according to the White Paper, was to "ramp down" its involvement in the domain name system, and pass governing functions over to the private sector.

"The single unifying force is that we don't want the government running things."

#### The IFWP

Immediately after the White Paper's release, an organization called the "International Forum on the White Paper" formed itself. The organization was sponsored by a gaggle of Internet related interests, and was committed to convening a series of public meetings at which ideas about this new corporation could be debated. IFWP held its first meeting in Virginia, and then subsequent meetings in Geneva, Singapore and finally Buenos Aires. And through this movable feast of constitution-making, as my friend Tara Lemmey described it, the IFWP tried to hammer out a consensus on a set of principles for this new corporation.

At the same time that IFWP was born, however, there were others who were thinking about what the new organization should be. Primary among these others was the old organizations that were governing domain names. And here there were essentially two - IANA, located in California, headed by Jon Postel, and again, NSI. NSI joined the IFWPprocess at the start; IANA at first was uncertain. But after the surprising success of this first IFWPmeeting, IANAdecided that it should participate. And so in Geneva, IANAwas full participant in the debates, and came to the sessions with draft bylaws in hand. Representatives stood on the floor of the working groups in Geneva as equals; they argued their ideas as equals, and they tried as equals to persuade others that their vision of this new corporation was the best.

IFWP was eager for IANA's participation. But the participants were not eager to hand the process over to IANA. When Postel offered IFWPhis draft bylaws as a basis for their discussion and debate, the working groups uniformly rejected the invitation. Agreement on principles would precede debates about lawyers' language. And the participants were interested in the principles, not the language.

So IANA went its own way — partially. It continued to participate in the IFWP process, as if it was participating as an equal in that process, but it also continued to develop its own draft bylaws. In a classically Internet-like way, its drafts were made public on the IANA web site, and comments were solicited from the Internet community as a whole. And as a comment pinged at the right tone, the draft was changed. It evolved as ideas from the net struck its authors as good.

IANAthus proceeded as IFWPdid to develop its own view in the way that it thought such views should be developed. IANA in a process of comments and drafts that it ultimately controlled; IFWP in an extraordinarily messy but public process, with meetings that its directors could not control. Both processes had a claim to legitimacy; but each represented the views of the net in a different way.

The IFWP process, however, had more opportunity than IANAto say something significant about what this change represented. I remember a particularly significant moment, when Ira Magaziner flew to Geneva to give a 10-minute talk, and then turned around and returned to the United States. Launching the Geneva meeting, Magaziner said, "I'm going to welcome you, and then I'm going to leave. Not to insult you by withdrawing my attention, but to symbolize just how the United States government conceives of this process. Our job is to begin these discussions, and then get out of the room." His words were met with strong applause, and once finished, he did just what he said. Jet lagged, and a bit rumpled, Magaziner left the stage and returned to the airport.

"The single unifying force is that we don't want the government running things."

When the IFWP process was over, the steering committee of the IFWP wanted

to transform the set of principles around which consensus had been formed into a document—a document that would form the basis of a new corporation, consistent with the principles of the White Paper. And so the IFWPinvited Harvard's Berkman Center to host a final drafting session, where the work of the international meeting could be transformed into a final document. The aim of IFWPwas that this final meeting draw together a representative group from the previous process, as well as representatives from IANA. IFWP's presupposition was that it would proceed only if these representatives would attend.

But here, the process stalled. For as Berkman scurried to see whether a meeting was possible, and spent hours on the phone with potential representatives, IANA made it increasingly clear that they would work to subvert any such final meeting. At first they were willing to talk about the idea of a meeting, so long as the meeting was not announced; and then, as time passed, and hence as time grew short, they became increasingly insistent that no meeting be held. Then just at the moment when Berkman could wait no longer, IANA's representative [Editor: Joe Sims] announced that he had secured from the major interests on the net — the corporate interests, the technical community, and some segment of the Steering Committee of IFWP-an agreement to resist any such final meeting. With his triumph, IANA's lawyer [Editor: Joe Sims] announced that Berkman and IFWP could hold their final drafting meeting if they wanted, but no one would come. No one would come because through private negotiations, the content of which no one really knows, IANA had cut a deal with enough people to stop the IFWP process.

Now, I don't mean to idolize what the IFWP had produced. And I don't mean to pretend that the consensus it had generated was perfect, or thick, or even consistent. There were problems with its process, not the least of which the economic problem of assuring representativeness. Only those with money could afford to fly to the most expensive cities in the world; and many with too much

money, and too little to say, seemed eager to fly.

But I do think there is something significant about this difference in process, especially as we become enamored of stakeholder government again. For while ideas in the IFWP process gained currency through public debate and public recognition, ideas in the IANA process gained currency in part at least through deals.

This was not IETF. It was not the product of a disparate collection of genius geeks, thinking through the engineering problem that Internet faced. It was a draft crafted by a lawyer — hired to represent his interests, and serving a complex set of interests, he hacked out his deal. It was a deal, a deal done by a very good lawyer, meeting in with many interests, and negotiating, to find an agreement. Doors closed. This was the process that produced the ICANN draft. It produced something else as well. For this lawyer who succeeded in striking the deal that was the ICANN draft—this Washington lawyer, skilled, one presumes, in making such deals-is also the author of something else of note to us. He is also the author of this phrase that I have recurred to so often in my talk. It was this lawyer who said, "The single unifying force is that we don't want the government running things." And in light of the process, and the freedom it allowed from the sorts of constraints that government might effect, we can begin to see why.

And so this should lead us to ask: When we don't have government running things; when we unite behind this mantra of anti-statism; when we erupt with this scream of what we don't want — do we know what we will have in exchange. When we don't have government, what will we have?

#### When Government Steps Aside

For here's the obvious point: When government steps aside, it is not as if nothing takes its place. When government disappears, it is not as if paradise prevails. It's not as if private interests have no inter-

ests; as if private interests don't have ends they will then pursue. To push the antigovernment button is not to teleport us to Eden. When the interests of government are gone, other interests take their place. Do we know what those interests are? And are we so certain they are anything better?

\*\*\* 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, represents 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 nondemocratic institution, and repulsed by parliament, a democratic institution?" Said the lawyer: "You just don't understand democracy." \*\*\*

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 anothema to our tradition. Who is cyberspace? Where would it vote? And it is said that this idea — this idea of governing cyberspace — is 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 Cyberspace, 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.

But our problem is not the problem of governance in cyberspace. Our problem is 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.

Here's what I mean.

The net is governed already. It is governed in places by people — by people who set the protocols of the space, people who enforce rules on the space; and it is governed everywhere by code — by the software and hardware that sets the architecture of the place, and sets the terms on which access to the space is granted. These governors — these rulers both human and code — impose values on the space. Their actions reflect the values of the space. Their rules are expressed primarily through code, but their rules are expressed also as rules. They give the space the character it has. The most famous of these governors are bodies such as IETF — rulers with humility, who express their law in requests for comments — RFCs. These governors, by the way they act, by their humility, by their respect for excellence—these governors give their rules, and the spaces that they constitute, a certain value. A collective value, that has earned it respect.

One would have thought that the values of this space were values that we should have some say about — we, people who populate the net, we whose lives are affected, or taken over by the net, we who depend more upon the net than we do upon local government. One would have thought that these were values that we would have something to say about. But then one wonders, how? How is it that these values would be values we choose. How is it that we could choose? How is it that we could have a role when the "single unifying force" is that the only mechanism that we've discovered to date for imposing collective values on a social space — we call that government — is the institution that we are all apparently devoted to rejecting.

It is as if the laws of nature were being written; it is as if they were being written while 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 stand wondering, should we have a role in this writing? \*\*\* One would think the answer was obviously yes. But the fact is that most of us would say that here the government should stay away. We modern Democrats from our well-developed representative Democracy —we, you and I, we and the Irish I spoke of — 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 for two very different reasons. One is very lawyerly and, almost by definition, the less interesting of the two. That reason goes like this: In the main the net is private — thankfully so, thankfully built (i.e., not funded) by someone other than government — but whether thankfully or not, formally the net is not government's creation. And so because the Internet is not government's creation, constitutional values that restrict government need not restrict actors on the net.

This limitation in our thought — given to us by lawyers — drives me nuts in its silliness. We are building the most important jurisdiction since the Louisiana Purchase, yet we are building it wholly outside of our constitutional tradition. There's no reason for this limit — no reason compelled by our history, or compelled by reason itself.

## We Should Focus on Liberty

If our objectives, as a society, are to protect ideals such as liberty, then my claim is that we should focus on liberty, and not so much on these obsessively legalistic distinctions about who or what is respon-

sible for the 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 concern was the threat posed by social norms, or stigma, to 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 the threats of both 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 whether government threatens freedom. We should ask whether the architectures of cyberspace protect traditional values of liberty, and speech, and privacy, and access - not whether government is interfering with liberty, and speech, and privacy, and access. The primary good here is a set of values, not absence of 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.

But I said that there were two reasons that we were disabled from imposing collective values on this space — public values that we would otherwise think natural for a government to sustain. The first we can blame lawyers for; but it is the second that is the most significant. For this is the reason of the Irish. It is this skepticism that we all bring to the 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. Our problem is that we don't know by whom, or how. We 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 rather than collective value. 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 battle over domain names is a perfect example. The White Paper called for 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 been making. In exchange, the government was to give up continuing control over the domain name system, and support its transition to an autonomous, separate entity.

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 about it, 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. This is policy making,

vested in what is in effect an independent agency, but an agency outside of the democratic process.

This is extremely odd behavior for democrats. That the idea that a governmental body, whether American or international, should set this governing policy was not even considered is profoundly interesting about us. It says something about us - about where we have come in this experiment with Democracy. It reflects a pathetic resignation that most of us feel about the product of ordinary government. And while I completely share the skepticism, and even 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. To steal the opening line from Justice Marshall's last opinion on the Supreme Court, we believe that 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 government might actually have a role in governing cyberspace.

I say all this not to excuse. I am explaining how we got here, not justifying it. I understand the resignation, and the impatience, with governance. But it is an impatience that we must overcome. We must isolate its cause, and separate it from its effect. If we hate government, we hate it not because the idea of collective values is anathema; if we hate Government, we hate it because we have grown tired of the corruption of our government. We have grown weary of its betrayal, of its games, of the interests that control. We have grown weary, but we must find a way to get over it.

For we stand on the edge of an era when fundamental choices about what life in this space, and therefore, life in real space, will be like. These choices will be made; there is no nature here to discover. And when these choices are made, they will be made either with the values that we hold sacred held influencing the choices that are made, or they will be made ignoring these values. There are values that we have in this space — val-

ues of free speech, or privacy, values of due process, or equality, values that define who we are, and which should lead us to ask — if there is not government to insist upon them, then who? So think again about ICANN — about the product of this domain name debate, and about what we should do now.

I spent a lot of time at the start complaining about the process that gave rise to this new corporation. I cannot help that. I am a constitutionalist; I am also a democrat; democracy within a constitutional system is all about process.

But I don't think we should reject the ICANN proposal merely because of process. We should not forget that our own constitution was erected upon actions themselves plainly unconstitutional.3 Madison's counsel then is still true now: The test is what was produced, for only it can forgive how it was produced. Rather than history, it is the future that should be the test for this new corporation: does it, we should ask, protect the values that we think important. There are some who say that it does not. John Gilmore is a perfect example here. Gilmore has earned the respect of the net; his work, and his values, have earned him that respect. So consider his struggle here. No person better embraces the values of the early net — the values of openness and freedom that seemed wired into that early net. And much of Gilmore's work has been a celebration of the values of that early net - "the net treats censorship as damage, and routes around it," is one example; the power of the net to crack laws on crypto a second.4

Gilmore's natural inclination, I suspect, would be to embrace the creation of bodies such as IANA. His respect, and affection, for people such as Postel would make him naturally open to the product of such friends. But last week, Gilmore had to make a choice, about whether to support old friends, or fundamental values. And Gilmore, no friend of government generally, chose values.5 In a balanced but fundamentally correct statement, Gilmore declared that we should reject these new bylaws of the new ICANN. And we should reject them because they don't embrace in terms the

values of due process, openness, and free speech.

Gilmore, however reluctantly, however sadly, has seen the reality of when the net hits earth. The code of the net will no longer guarantee the values that he, and I, think fundamental. And so however reluctantly, he chose. And he chose to reject this corporation. I like Gilmore's method; I like the values he teaches. But I don't yet share his response. For in this grand experiment in "self-government" — this pathological urge to rid self-rule of anything called "government" — there is a third way out. We are not limited to choices of the Commerce Department, or ICANN. We are not constrained to accept or reject what has been proposed. Instead, there is a role here for the government in deciding whether this new corporation lives up to the values that are our tradition.

The role is to insist. The government need not simply accept the corporation as it has been designed; it is not constrained simply to roll over in the face of a set of well-typed by-laws. It can say, we will acknowledge you only if you make the following modifications to your structure. It can insist on changes that would make the organization ours. And if the drafters accept these modifications, then the sins of its past notwithstanding, I believe this body could be a start.

What are its flaws? I count three, but it's only the first that I want to describe here.6 The first is accountability. The greatest danger of this emerging structure is the insulation it erects against influences from the outside. Not all influences; just those influences that don't express themselves in a technical organization. The corporation is a closed corporation; the board is potentially self-perpetuating.

This could be changed. As the Boston Working Group rightly insisted,7 the corporation could be constituted with a requirement entrenched in the articles of incorporation, pushing it into a membership organization. The government should insist upon this change.

Here is a role for government to play. Not

necessarily in the building of this selfgoverning body; not necessarily in the regulation of this self-governing body; but at least in the values of this self-governing body. And whether or not these values reach as broadly as Gilmore recommends, it is crucially important that the government play at least this role. We may not want government running things; but government must assure that the running runs according to the values that are ours. \*\*\* When this question about domain names is resolved, however, this problem won't go away. For the domain name dispute is but the first of a series. And it is the series that pushes us to resolve the more general problem.

In his rightly famous book,8 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 significance 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 apart 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 where they lived. Other states were as remote to them as Tibet is to us — indeed, it is easier for us to go to Tibet that 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 stand today 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 for 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 feel that we are part of a world, and that 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 we will do is just what we are beginning to do now. We will create private, nonprofit corporations dedicated to the public interest. We will, that is, create bodies to govern. And when we do this, we will only do it well if we have abandoned this selfindulgent anti-governmentalism. We will only do it well if we develop again a capacity to choose. We will need the capacity to say what values this space is to have. And we will need to govern ourselves there. The single unifying force should be that we govern ourselves there. Whether government runs things or not, we should govern ourselves. Right now, we cannot. This much about us must change.

#### Footnotes:

- 1 Bloomberg Business News, "Internet Control Compromise Could Keep US Regulators At Bay," September 30, 1998.
- 2 See Payne v. Tennessee, http://supct.law.cornell.edu/supct/html/9 0- 5721.ZD1.html, Marshall, dissenting.
- 3 See discussion in Akhil Amar, Philadelphia Revisited: Amending the Constitution Outside Article V, 55 U. Chi. L. Rev. 1043 (1988).
- 4 See Electronic Freedom Foundation , Cracking DES (1998). 5See< http://www.eff.org/pub/GII\_NII/DNS\_co ntrol/HTML/19980929 \_gil more\_new\_iana.html>
- 6 I describe the three in http://cyber.law.harvard.edu/works/lessig/c.pdf .
- 7 See http://www.mama-tech.com/boston/merged-bwg-bylaws.html .
- 8 Profiles of Courage (Memorial Edition, 1989).