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The Internet: Place, Property, or Thing—All or None of the Above?

October 30, 2003

Luncheon Keynote Speech

by Hans Klein^{*}

MR. WALKER: Good afternoon. I am glad you are here for lunch at this wonderful Symposium. I have just had an interesting lunchtime chat with one of our speakers from this morning, Jennifer Granick, and our speaker for this lunch, Hans Klein. He, among other things, is one of the founding members of ICANN, which is the Internet Corporation for Assigned Names and Numbers. Mr. Klein is going to speak about that some this afternoon, and we are glad to have him.

Mr. Klein is an associate professor in the School of Public Policy at the Georgia Institute of Technology. He graduated from Princeton in 1983 and then did software work mostly in Europe. Then he went back to school and got a Master's Degree and a Ph.D. at M.I.T. in Cambridge, Massachusetts. For the last seven years, Mr. Klein has been teaching at Georgia Tech. We are delighted that he is here today. He has fascinating things to talk about, and thank you, Hans, for joining us.

MR. KLEIN: Thank you very much. I would have to say that if someone from ICANN heard me described as one of the founding members of ICANN, they would not quite agree. I have been working

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more on the public interest side of ICANN of global governance. So although I have been very involved with ICANN, the Internet Corporation for Assigned Names and Numbers, and although I have been participating and working with ICANN from the beginning, I have not always been such a welcomed member at their parties. Of course, I think this is because there are a lot of issues of legitimacy and fair representation of different stakeholders in the ICANN processes, and sometimes the people who really were the founding members of ICANN did not give those issues the same priority that people like I did. Today my talk is titled "The Internet and Global Public Policy."

My speech may be a little bit different from some of the approaches you have heard earlier today. I am not a lawyer. I will talk more with a political science approach, and my focus is more on global issues with a focus on institutions and the creation of institutions within which public policy is made at the global level.

The Internet is an amazing technological system, and we are getting more and more into the interesting law that surrounds it. But the Internet is also extremely interesting from the institutional perspective. The Internet can be seen as a sector where we have seen some institutional pioneering. This sector, the Internet, is a home to a very interesting institutional experiment in global regulation, and that experiment is ICANN. That is really what I am going to talk about today, and that is the focus of what is happening for global public policy on the Internet.

I will tell you about it in just somewhat of a brief overview. ICANN is a private entity that performs global governance or global policy making. It is based on contract law, and I will say a little bit about that later, but not too much, because I am a little worried that my audience might know more about contract law than I know about contract law. There are two audiences you want to be very careful about giving talks to: engineers and lawyers. You have to be careful when speaking to engineers because they will always say, "You gave this long talk, but when you mentioned the address of the following Internet server, you got that wrong, and we're going to point it out very publicly that you got that wrong." Maybe the legal community is similarly precise in some of its accuracy. So, I will mention a bit on contract law, but hopefully not too much. Then I will finish with some questions about the legitimacy of this institution. Obviously that is a core issue in political science and in novel forms of policy making.

I will start with the big picture on governance. The dilemma of global governance begins before we even talk about the Internet. A lot is going on in the area of globalization and in the area of governance. To conceptualize or to think about globalization, we start with systems—functional systems—and by that I mean things like the system of trade between nations. The system of the environment, the atmospheric environment, the environmental system of which we all play a part, whether in China, Argentina, or the United States; and likewise, global systems of communication that span the world and connect people in different parts of the world.

These systems have global functionality. I put up a Web page in Atlanta, and somebody in Beijing accesses it. The systems interact, and we can communicate with each other even though we are crossing the globe and even though we are crossing many legal and political systems.

Such global systems need governance. At a minimum, they need coordination. If the system has a technological basis, it needs some kind of management of the technological core. At other times maybe the systems do not need governance, but they ought to have governance because of the perception that the global environment needs governance to keep it from being destroyed through excessive pollution and so on. So when there are global systems—global functionality—there arises a need for global governance. What we are seeing more and more in the world as more of our systems go global is that the global systems need some kind of overarching coordinator. Then the question arises of who is going to be the global coordinator for the different systems.

One classical, traditional answer has been the nation state. National governments provide coordination and government services and make policies and regulations to manage these systems. But nation states are limited in their geographical scope, and once you go global you have the question of who the regulator at the global level is going to be. This debate occurs over and over and over. For example, that is the debate over the WTO [World Trade Organization], the fight in Seattle, the questions on the Kioto protocol on the environment, and the Internet. The debate concerning regulation of the Internet is what I am going to be talking about today.

Who governs? Well, let us look at some of the options that are out there, both historical and those that are emerging. We are seeing the emergence of global governance institutions. The sort of granddaddy of global governance institutions goes back more than fifty years to the United Nations ("U.N."). Some U.N. agencies have been doing this for a while. The International Telecommunications Union ("ITU") has actually been coordinating telephone systems before there was a U.N. The ITU predates the U.N. and it manages coordination of the different numbering schemes for different countries. ITU performs some global governance issues. Also, another U.N. agency, the World International Property Organization ("WIPO"), governs some intellectual property issues. So, the U.N. is one global or supra-national institution whose agencies have been performing some of these global governance tasks.

There are other institutions that are newer, and we are seeing new models emerge. More recently, the Multi-Lateral Treaty has been used quite significantly in the World Trade Organization ("WTO"). The WTO has many links with the U.N., particularly the WIPO, but it is not a U.N. agency. It is a different kind of beast. Even more recently, in the case of the Internet, we are seeing an experiment in a private corporation. Whereas the WTO is based on national governments making treaties, we are now seeing a corporate entity, ostensibly independent of governments, operating somewhat autonomously and performing these global governance and coordination functions. This corporate entity is ICANN. It is a path-breaking experiment in institutional design and a new way of managing things at the global level.

So, let us look now at ICANN in more detail. There was a lot of controversy when ICANN was created, and maybe there was a sense of humor among the people who finally launched it over the opposition. When they triumphed over the opposition and created this private corporation, they named it ICANN, and maybe that is a subtle reminder of what they were able to achieve. ICANN was created in 1998 under the Clinton Administration, and Ira Magaziner was the point person for this and for the Clinton Administration's policy of Internet privatization. ICANN is incorporated; its corporate form is a 501(c)(3) corporation based in the U.S. state of California. It is ironic that ICANN is not even a national corporation; it is a state level corporation, Even though ICANN is a global regulator, a global governor, and goes beyond national boundaries, it is anchored in California.

I do not have an organizational chart here, but the top level of ICANN has a board of directors that makes policy. Consequently, when we say ICANN is making policy, we are really talking about its upper level board of directors. ICANN has a staff but the staff is not very big. When ICANN was created, it consisted of about ten people, and I think it has grown to maybe twenty. I have not checked recently, but it is a relatively small organization. Most of its work is done through subcontractors. Therefore, its responsibility for actually operating some of the Internet hardware is done by other entities. ICANN does not interface directly with many Internet users; it interfaces through retailers, and I will say a little bit more about that later.

Now, a key detail about ICANN is that even though it is a private corporation, the U.S. Government was supposed to formally cede control over this corporation shortly after its creation. That important final step has not been implemented. Therefore, this private corporation ultimately is still under U.S. control. It is a bit of an ambiguous institution because it is an imperfect privatization. One government, one public sector player, still has its thumb on this organization, and that happens to be the U.S. Government, the Department of Commerce in particular, which creates a bit of an ambiguous situation. But, that is the basic outline: A non-profit, relatively private organization with a board of directors at the top dating back to 1998.

ICANN's main task and the real origin of the organization was technical in nature. If ICANN does nothing else, it has one technical task. It performs technical control of the DNS, the Domain Name System. The DNS is a very interesting part of the Internet. In fact, it is a more important piece of the Internet than what we would think. I am guessing that by now most of us are aware that this is not the case, but we have the vision of the Internet as an uncontrollable, decentralized network of networks where everybody can do their own thing and that there is no place where you can sit and get all the users and get control of the system. That is true at the level of communications between different computers on the Internet. Different private networks communicate with each other through a shared protocol, a TCPIP protocol.

But computer networks need more than communication channels. They also need addressing, and addressing in the Internet is not this wonderful, decentralized thing. Addressing is a relatively highly centralized system. Internet addresses are the ones we interact with for the most part; the addresses are alpha-numeric, character addresses, and domain names, mostly like E-D-U, Microsoft.com, ACLU.org, etc. You need those addresses. For all practical purposes, those addresses are always needed to access Web pages and to send e-mails. Engineers in the audience would quickly point out that, in fact, you can do a lot of Internet functionality using I.P. addresses, but there are reasons why that does not work so well. It does not work well over time.

For all intents and purposes, everybody who is using the Internet has to be using it by the domain name system. If I want to look at somebody else's Web page, I have to have a domain name, Mercer.edu, so that I can type it in and go see what Mercer.edu is offering on the Web. If I want to publish something on the Web, I first have to get access to a domain name so that there is a domain name address by which others can find me. If I do not have a domain name address, people cannot find me. If others do not have it, I cannot find them. Therefore, domain names are an essential resource on the Internet. It is kind of like you need a radio spectrum to listen to the radio. Taking it a little further, oil is needed for things. These are strategic resources that exist in the world, and people who regulate them are keenly sensitive to identifying those places where there is an essential resource. It gives you a standing point to do regulation.

ICANN's technical function is to manage and control the domain name system. Essentially, control of the DNS is control of the Internet. And, I use the word, "control." That is a dark connotation. But, in a sense, whoever manages the DNS can impose conditions on everyone else's use of the Internet. It allows for regulation. The control of the DNS fulfills the condition of regulability of the Internet. For those of you who have read Larry Lessig [law professor at Stanford University and author of CODE AND OTHER LAWS OF CYBERSPACE], he talks about regulability. He does not talk too much about the DNS, but the DNS allows for regulability. It provides a place from which user behavior can be controlled.

What kind of regulations does ICANN impose? Well, when I want to get an Internet domain, Mercer.edu, as an end user, I do not go directly to ICANN. ICANN has intermediaries and subcontractors; it has retailers. I go to a retailer, and I pay a certain price. Then every year I renew that, I pay the same price, and I get my domain name back so I am able to host a Web page. Besides allocating that technical resource to me, ICANN is a global regulator. ICANN adds certain conditions to my use of that essential resource. Now, I will go through some of those.

First of all, what kind of regulations does ICANN attach to the domain use system? The first one we will talk about is price and industry regulation. ICANN is essentially a utility—an Internet utility—that supplies addresses and domain names to everybody. There is only one supplier; therefore, it has this regulated base price that everybody has to pay and that the intermediate retailers have to pay. That is the price setting function of ICANN.

I think about eight dollars is charged per domain name. The retailers pay eight dollars wholesale, and then they sell it to users in a competitive retail market at a higher price. What you have probably noticed—any of you who have domain names—is that it pays to shop around before you register a domain name. And, over time the prices have dropped. It is not as expensive as it used to be. But, the base price for wholesale and the competition in retail is a creation of ICANN as an industry regulator.

ICANN also regulates the supply of domain names. Over time, there has been a slow trickle of new domain names. It used to be .com, .net, .org, lots of country codes, and so on. But now there are things like .bus, .info, and .museum. There are a few more but not too many. I think there is still a significant scarcity in domain names, or perhaps the new entrants came so late that we are still culturally leaning towards .com. But, with that supply of domain names, there is no technical reason why we could not have many different top level names like .com and .org. We could have hundreds. ICANN has sort of been the entity to decide just how many names are available, at what rate they come on, and who gets to operate the hardware that serves those names. ICANN not only provides price regulation, it also provides supply regulation.

And, finally, ICANN does some access regulation. I will talk more about this, but in a simple way, it has a first-come, first-served principle of access. In other words, once you pay the fee that ICANN has set and choose a domain name from ICANN's limited choices, ICANN gives you a domain name. The first to ask for the domain name gets it subject to some additional regulations that ICANN has promulgated and that I am going to talk about next.

Besides price and supply regulation, ICANN is engaged in some nations' trademark regulation and intellectual property regulation. Now, it is a funny thing. One of the great tragedies of the Internet is that the designers, the engineers who designed it, created this very useful alphanumeric string, these domain names, as addresses. The result is different than the telephone system. The telephone system uses numbers as addresses. If I want to get in touch with you by telephone, I have a series of numbers. I rarely will kill someone for those numbers. Occasionally, I will. 1-800-FLOWERS is worth a lot of money, but (404) 894-2258, my office phone number, I could really care less about. People do not kill each other over phone numbers. People do kill each other over Internet addresses because there are all of these opportunities to look like flowers, Microsoft, Mercer, or things like that. So an early technical decision to use alpha characters in the addressing led to addresses having a dual function. Addresses not only uniquely identify a website, but they give you some sense of the website's content or whose website it is.

For example, Coca-Cola.com is a unique character string that identifies a server somewhere on the Internet, but it also strongly suggests that on that server I am going to find information by or about the Coca-Cola Corporation. Or, a more historically controversial example, Crew.com might suggest to some that I am going to find clothing and apparel by the J. Crew Company. Or, Drugs.com suggests that it is a good place to get online prescriptions.

These address names get mixed up with trademarks. I am guessing that most of you know more about trademark law than I do, but I have certainly been impressed by the ferocity with which individuals and corporations defend their rights to trademark. Because ICANN is the manager of domain names, it got tangled in trademark regulation. Or perhaps, it was more that ICANN was seen as a means to do some global level trademark regulation, and ICANN did get into that. When trademarks are used at the global level, there are no consistent regulations to manage trademarks. Trademark disputes in the international arena are ugly. They are expensive, and ICANN, at least in the area of domain names, created global regulations to simplify disputes over trademarks. But, in so doing it broke new ground; it created global regulations over intellectual property. I know there is not very much of that, and there may very well be almost none of that. Therefore, ICANN created a uniform dispute resolution policy so that when there is a dispute over trademarks and domain names, there are rules for deciding who owned that character string—who had the property rights over that name. In so doing, ICANN created de facto property rights and a basis for reallocating domain names.

That is a pretty significant kind of global regulation. We are now well past the engineering issues of allocating domain names so that everyone has a unique one. We now have a governance body that is making decisions over intellectual property. Intellectual property is clearly a matter for governments that make public policies, and ICANN is making a baby step, in a very significant policy domain.

A more general level of regulation, ICANN'S ability to attach conditions, will give you a sense of ICANN's potential to be a fairly significant regulator. ICANN's potential is one of its biggest features. Because a domain name is needed to get access to the Internet, if you regulate domain names by attaching conditions to domain names, you can quite effectively regulate all Internet users. So, how are conditions attached to domain names? They are attached in the contractual terms of use that people agree to when they make a contract to rent their domain name.

Does anybody here have a domain name? Has anyone registered a domain name? You probably did not read the fine print; although, maybe in this audience, you did read the fine print. But, the fine print is pretty interesting to read because it says that, and then it says the next thing, and then it says the following language in this contract comes from ICANN. It does not come from me, your retailer, or your domain name. The fine print also provides that you must agree to the following language from ICANN.

ICANN sets the kinds of regulations it wants to impose, and it passes them on to the retailer. It says if you are going to be a retailer of domain names, and if you want to have access to the common pool of domain names, you have to agree to the regulations that we have promulgated here. And in turn, you, Mr. Retailer, have to pass them down to the domain name user. So the contractual terms contain the regulations, and they cascade down through this series of contracts from ICANN to the user, or at least the user of the domain name. The penalty for noncompliance, if you do not obey the rules that have been passed down through these contracts, is denial of access—you could lose your domain name.

Therefore, by registering a domain name, you may not be aware of it, but you agree to abide by the terms of the Uniform Dispute Resolution Policy that I mentioned previously. If you decide not to abide by it, and if someone challenges your domain name and you say you will not abide by this policy, then you could lose your domain name. That is the sanction. That is the back-up enforcement mechanism for those regulations.

Right now, ICANN is not doing a lot of regulating, but the interesting thing is that the capacity for regulation is there. We have seen some price regulation, some industry regulation, and some trademark regulation. What other kinds of things could possibly be regulated at the global level by this organization? Here are some things. Most of these have been held up in debate around ICANN. ICANN has been accused of imposing a tax on Internet users by setting its base wholesale price at eight dollars. ICANN vociferously denied that it was taxing. This happened in the U.S. Congress, so of course, any accusations of taxation are an anathema. ICANN is trying to tax us. Then, of course, everyone gangs up and tries to hammer ICANN down. But, the reality is that ICANN does have the technical capability to impose fees and to collect revenue from all Internet users in their annual payment for the domain name. This is a revenue generating mechanism.

Another debate that happened around ICANN concerned privacy. In theory, but not in practice, ICANN could say that anyone who signs a contract to get a domain name also must sign onto the following conditions about privacy. And, you can imagine a case where ICANN would be very pro privacy, requiring that all websites uphold a high standard of privacy. The hypothetical has not happened, and it would be a fairly significant regulation to impose on users around the world, but I cite it here because somebody tripped up the Chair of ICANN on exactly this issue.

One of the public interest advocates, a D.C.-based nonprofit organization, was trying to make the point that ICANN had the power to regulate, and this was a pro-privacy organization. The organization asked the Chair of ICANN, who was busy saying we are harmless, we are nice, you should like us, and the Chair said, "Well, we like privacy here in our organization." Then, the organization asked the Chair, "Would you and ICANN be willing and able to impose a privacy policy on all Internet users?" And the ICANN spokesperson made a little mistake, unthinking, and said, "Oh, yes, we can do that. We can do that. Do not worry. You should like us, and we can impose the privacy policy." That was a bit of a set-up because what the ICANN spokesperson really admitted was that ICANN had the power to impose a privacy policy. Now, you can debate the details of it, but it is significant that a capacity exists in some degree for a policy like that.

There are other policies that can conceivably be implemented through ICANN. Security is a pretty good one because a lot of security policies require tracing traffic patterns, and ICANN would conceivably be a place where it could impose conditions on all Internet users that they have to get positive identification before they let anyone use e-mail. That would hugely benefit the people that want a higher degree of security. Currently, those policies do not exist. Anybody can go to Hotmail, but in that hypothetical we could see a world in which you would actually have to show proof of identity to get your e-mail account.

As for copyright, some of the copyright interests have said that ICANN really ought to have the power to regulate anybody who puts postcopyrighted material on the Web by denying their domain names and by getting that material off the Web. That would be another hypothetical regulation that is related to content. You might imagine a case where, say, certain kinds of content, Nazi memorabilia or whatever, could be regulated.

Now, you could debate all of these regulations until you turn blue, but could they really happen? Is it politically feasible? But, the key point is that the old view that the Internet is a decentralized thing with no central point from which it can be regulated is untrue. There is a central point, and the capacities for regulation are there. They are there to a small degree today but could be there to a greater degree tomorrow. And I can virtually guarantee that over time, if ICANN survives, it has some challenges, but if it survives, you will see a growth in its scope of regulation. You will see mission creep simply because it is so useful to have this thing out there from which rules can be issued.

Here is a little aside. As I have described it so far, we have ICANN, the retailers, and the domain name users. But, only three out of four of us have registered domain names. Most of us do not have registered domain names; most people have not signed the contracts with ICANN. So how would we be subject to the regulations that are attached to domain names? Well, currently ICANN reaches our Internet Service Providers (ISPs). For example, at a university, a student has a university e-mail account or an industry e-mail account, so the user has a contract with our ISP. The contract contains terms of use, and our ISPs regulate users. Such contracts have acceptable use policies, and they have contracts. Users have to pay, and they are not allowed to do certain things. At a university, the ISP tells users do not install KaZaA on the university network, and things like that. At least at Georgia Tech, they threatened us with things like that. Even though ICANN does not make it to the end user, ICANN makes it to the ISP, and the ISPs have contracts with end users. So there is a contractual link, a chain of contracts going all the way from ICANN to the end user. So hypothetically the contracts could be extended. ICANN's terms could be included in that last link to the user, and then the user would have a full connection between the one entity, at what is called the root that controls the domain name system, all the way down to literally every end user, everyone who has an e-mail account, unless some clever engineer can finesse the system and avoid the contract. Maybe some peer-to-peer networks avoid some of this as well, but for most, it would be quite feasible for the next time, next semester when you renew your e-mail account to establish some new language in the terms of use contract. That certainly could be realized.

So back to the big picture. When you put it all together, there is a governance system in place, a global governance system with regulation by a contract that has a potential to touch every user. Every single user has indirectly contracted with this one entity, ICANN. Users have consistent conditions and access to every user around the globe, which in effect achieves a regulatory degree of harmony at the global level, which is very hard to do. And, when you think about it, certainly, it might have many positive consequences, and it could have less than positive consequences, but the fact that it is possible in and of itself is significant. It is a very interesting case of a global regulatory entity.

Now here is the stickler on this: Some people, particularly in the United States, say that government, or any kind of regulation per se is bad, bad, bad. Government is bad. We should be a more libertarian system. Now, I am not going to go there. My feelings are mixed and other people even debate this, but I think the idea of having regulation, coordination, and policies for functional systems is not such a bad thing. There is nothing new there, so in and of itself I hesitate to say it is bad. But clearly when you have a regulatory entity in place, the issue of legitimacy becomes quite important. Who makes the rules? Who makes the regulations that would affect everyone? ICANN is where a lot of the criticism of this global institution is focused.

There are two high-level authorities. First of all, the U.S. is in the background saying that ICANN is private: Well, we have a veto power, but we would never veto anything like that, so please just forget that we are here. But, there really is a global regulator under the authority of the United States Government, and, this does not make the other governments of the world happy. On a more day-to-day basis, the top authority, the regulator of ICANN, is its Board of Directors. And, the composition of the Board of Directors was an enormous controversy.

Between 1998, when ICANN was created, and 2002, there were many changes in the by-laws as different groups battled to exclude others. Once the smoke cleared and the dust settled, there was essentially the Internet supply industry. The industrial, the business players, are the ones represented on the Board of Directors of ICANN.

Initially, to counterbalance the supply industry, there was going to be a consumer or user voice. The original Board of Directors was evenly split between the supply industry and users. But as the by-laws were successively rewritten, the user representatives were pushed back, back, back, back, back, and then finally off, and there are no longer user representatives on the Board of Directors.

Some government officials said, as this battle was being fought that you have to be careful because if you succeed in getting the users off your board of directors, you are going to look at lot like an industry cartel, and if you look like a cartel, then you will be a candidate for governmental regulation. The European Union spoke along these lines. Well, the ICANN Board of Directors no longer contains users; it is primarily industry representatives that are making the decisions, and we have not yet seen the governments, particularly the European Union, veto ICANN and create an alternative, but that could still happen.

In any case, on the question of legitimacy, there are a number of commentators, and I would say more than one of them, who really feel that ICANN's legitimacy as a regulator is weakened by the shifts on its Board of Directors. What we have now as far as legitimacy of all the stakeholders, user stakeholders, industry stakeholders, only a subset of those stakeholders are on the Board, and of all the governments who might have a voice in these regulations, only the U.S. has direct control over the organization.

What are some of the consequences? You already can see some of the consequences of who is in and who is out. Arguably, in some of its decisions, ICANN has favored the industries who have an inside voice in its Board of Directors. We have seen a slow expansion of the name space. What happens is that ICANN, by keeping a limited number of domain names, can favor the incumbent corporations that act as retailers for the domain names. There could have been a thousand different .com, .org, .this, .that, almost anything. A lot of small scale entrepreneurs, a lot of entrants said, "Please, we have this great idea, .web, let us do it. We want to start a new business. We think there is an opportunity." But, the ICANN Board of Directors said, "Well, let us not rush into this. You never know what will happen. Let us be very cautious. We're just going to keep .com for a while longer, maybe a year or two or three." And what happened is the incumbents arguably were able to extract rents from the system. Because the incumbents had an

advantage, new entrants were barred from entering the system, and so the incumbents became quite profitable.

The big daddy of all incumbents is, of course, Network Solutions, which when it was purchased that .com character strain had a value of 22 billion dollars. Now, what value did this organization really have that made it worth 22 billion dollars? Well, it had .com. It had that character string. And there were no other character strings that people associated with an important meaning. It was quite profitable to restrain new entrants into this market. That is one of the byproducts of limiting access to the board of directors to just the industry players.

Limiting governmental oversight to just one government has also been the course of a few issues. For instance, the .org domain name was run initially by Network Solutions, but because Network Solutions was making so much money off .com, it agreed to give up .org. Network Solutions gave .org to another player who would make that market opportunity. And, among insider circles it was quickly sniffed out that one had to be a U.S. consortium to run .org because the back channel word was that the U.S. Government would not be comfortable with offshoring such a big piece of the Internet. Now, the U.S. Government has that kind of influence because it has a veto power. If the U.S. Government did not have that veto power, a different consortium might have picked up .org and operated it. As it is, the Internet Society based in Weston, Virginia, just outside of D.C., now operates .org.

There was an interesting case earlier of a possible conflict of interest at the political level: ICANN proposed to add a domain name .ps for Palestine. Everybody said, whoa, let us watch what happens here. Is the U.S. going to allow .ps to be added to the domain names because it looks like it could possibly get all tangled up with the U.S. Middle Eastern policy. Everyone held their breath and watched what happened. And, in fact, the U.S. did not veto that decision. It let .ps become a domain name. But, the fact is that it really highlighted the question of what everyone was saying was going to happen? It highlighted the fact that there is one government that is a little more equal in the global regulatory body.

This history is still being written even as we speak. The existing older governances are challenging ICANN. We have the United Nations, the ITU, International Telecommunications Union, that would very much like to be the global coordinator for the Internet and very much like to have some of these functions on its turf. It has become a turf battle now. The old ITU, the new ICANN—who is going to be the global governance institution? Right now, it is ICANN, but the ITU is chipping away. A big opportunity for changing this is coming in December. There is a world summit. There are world summits on women in Beijing, a world summit on human rights, on freedom of housing. There is a world summit on the information society being held this December, just about a month-and-a-half away. It is looking at many different issues like the role of information technology in national development and so on. One of the issues is Internet governance, so there may be an opportunity for governance outside the United States to say, listen, we are not happy with ICANN. We do not think it has achieved legitimacy. We want to shift some of this authority over to a different player. And, you might see a split, probably between the U.S. and maybe the E.U., or a split between the more-developed countries and the lesser-developed countries. Although in that second split, I would guess that the more developed countries would win. But if the U.S. and the E.U. split, two global regulators might appear. It is something to watch in the next year.

I think the two institutions offer two visions of governance. In some ways the U.N. offers the benefit of legitimacy. Many national governments have a voice. But it has a reputation for not being particularly efficient and for really slowing things down. ICANN is a little weak on the legitimacy front, but it gets things done; it passes laws and keeps things going. This is one of the debates going on. What should we give priority to in governance, legitimacy or efficiency? That was the same issue on the streets of Seattle. The people on the inside said please leave us alone. It's hard enough as it is to negotiate a trade agreement for the global regulation of trade. And the people on the street said you are not representing us. This is not a legitimate process. We would like it to change. That is a common theme, and we are seeing it being played out now with ICANN.

To finish on a big picture note, reflections on global governance, I think there is a need for global regulators. Globalization is happening. We are seeing it go on. What does it all mean? If ICANN had been realized in its original form as a completely private global regulator, unlike other private corporations, it would almost be alongside national governments. ICANN would have some of the powers of the national governments: The regulatory powers, the power to sanction, in a specific domain on the Internet, but it would do that without the foundation in that territory. It is a tiny step in a really interesting direction in international relations. It is public authority being exercised independently of what we would normally call the government of a nation state. And that is a little bit of the debate with WTO. Ultimately, who makes the rules and regulations in the WTO? Are consortiums of industry increasingly making some of these rules? Then some of the questions are, what is legitimate. How important is legitimacy? Should we not worry so much about the legitimacy and just try to get some global

regulations because they are so difficult to get in the first place? Maybe we should not worry so much about legitimacy.

In my mind, I do not have a real solution. In the U.N. versus ICANN, or the ITU versus ICANN, I do not see an obviously better solution. But, one way in the short run of coping with this would be to find ways to minimize the regulation—minimize the mission creep of these global organizations so that the issue of legitimacy is less pressing. If the global organization is doing a small amount of regulation, just a minimum coordination, then who is making those decisions is less of a burning issue. As we see mission creep and expansion in scope, then legitimacy comes to the forefront, and there is not an obvious solution to the problem of legitimacy right now. Therefore, in the short run, keeping the mission quite small is perhaps the best we can do.

Okay, I have used up almost all the time. I do not know if we have time for questions. Thank you for listening. * * *