

# Panel One:

## Information Issues: Intellectual

## Property, Privacy, Integrity,

## Interoperability, and the Economics

## of Information

Panelists: Anne W. Branscomb, Senior Scholar in Residence, Annenberg Public Policy Center, University of Pennsylvania; Research Associate, Program on Information Resources Policy, Harvard University.

Brian Kahin, Director, Information Infrastructure Project, Kennedy School of Government, Harvard University.

Ellen M. Kirsh, Vice-President, General Counsel, and Secretary, America Online, Inc.

P. Michael Nugent, Vice-President and General Counsel for Technology and Intellectual Property, Citicorp.

Moderator: Fred H. Cate, Annenberg Senior Fellow and Covener; Associate Professor of Law and Faculty Advisor to the *Federal Communications Law Journal*, Indiana University School of Law—Bloomington.

Mr. Cate: Let's start with these questions: Are these issues new? Are there more of them? Are they more important?

Mr. Nugent: Well, it is hard to say. I think what we are seeing is more and more attention to these issues within companies and I will just speak from that point of view, take a look at Citibank. It is an information company. We are slowly realizing that in the sense of marshaling resources to deal with the various issues. We have about 1500 employees in telecommunications in Citibank, who run our network globally, in ninety countries. We spend about \$1.5 billion on technology, software, people,

and telecommunications. We have about 4000 programmers. Believe it or not, people write code, not only updating our systems but changing our systems to comply with the law, to deal with interactivity, and to get on the Internet. We have thirteen patent applications for systems we have invented.

We have brand name identification around the world with Citicorp and Diner's Club. That is a huge asset, which suddenly we are realizing has monetary implications to it. We are getting on the Internet. We are offering home banking over the Internet, or we will be soon. We have our home page already. We are linked now with Prodigy. I think we are talking to America Online. We have talked to the Department of Justice about Microsoft's acquisition of Intuit. We have been involved in electronic cash products, electronic money products, Smart cards, Smart phones, and credit cards. It is a revolution, and this is a changing world. All of these issues are governed by things other than banking law. Banking law says nothing about any of this. Securities law says nothing about any of this.

One of the most important management teams in Citibank is not the chief loan officer, but the chief architect, the one who invents the technology that is going to govern the delivery of a product to a customer. We are trying to present a seamless face, technology-wise, to our customers. So that if you are a Japanese customer who happens to be in Singapore today doing business, you can access the Citibank ATM, call up your Japanese language screen, and do whatever the Japanese law permits you to do in Singapore. In Singapore, you can get yen, or Singapore currency, or

maybe even Egyptian currency because you are going to Cairo the next day.

Over the last few years we are realizing that the issues that confront Citibank are not just the banking law issues. In fact, if the restrictions of the Glass-Steagall Act(1) are overcome, and we are allowed to engage in interstate banking, Citibank is really not interested in acquiring branches or going nationwide through acquisition. We are going via technology. We are not going via brick and mortar. We are going to be around-the-world via technology, and we are in ninety countries.

I think there is more definition now to the idea of an information lawyer, one who deals with a panoply of legal and regulatory issues that affect an information services company, such as Citibank, and which all service providers are becoming. If you take just one product offering, I think it gives you an illustration of the kinds of information issues Citibank faces. Take the example of Citibank's ATM card. When you are a Japanese customer going to our ATM in Singapore, you use the Citibank proprietary card. It is a Smart it will be a Smart card. We have all sorts of patent issues involved with that. If we wanted to get into Singapore to make this offering possible, we would have to deal with currency exchange laws governing how much currency we can make available to a Singapore citizen or a nonresident at the ATM. There is the traditional banking law, but our big problems these days are money laundering laws. We have to show that we are complying with money laundering laws.

We have to make sure that the encryption devices that we have available at the ATMs have arrived there appropriately and are being used appropriately. And there are exceptions in the encryption law for that. We also have to obtain access to the network, because generally it is a private lease-line network that we use to connect our ATMs to our node; that in turn gets them back to our profits in the authorization center in the U.S. This is all Citibank proprietary.

Privacy rules, regarding the collection of the data at the ATM on the customer and the transport of that data to the United States for authorization of the withdrawal, come into play. Then, we determine whether we can do what we want to do in Singapore with this ATM offering. And you may have a fifty-page memorandum covering all these issues. Five to seven pages will cover banking law. The rest is all what I call these information law issues—these other issues that we must hurdle in order to make this kind of an offering possible.

Citibank, as an information service company, has become enmeshed in all of these issues and is no longer perceived as a bank within Citibank. The rules, the regulations, the technology, and the different issues we have to deal with have transcended what normally would confront an institution.

Ms. Kirsh: When I was a college student, which was in the late '60s, I used to actually believe that there was a revolution going on. I used to answer the phone; instead of saying hello, I would say, "Revolution." And when my parents came home, they would just lose it. There I was in Boston waiting for the revolution. It was only when I graduated that I realized that actually there was not a revolution and that I was going to have to go get a job.

I kind of put that away as history. And then, I really never thought much about being a revolutionary at all until I got to America Online (AOL), and I think finally the revolution has come into my life. It is many years later, but it is very real all around me. So when you say, "Are these new issues?" I have to say they may not be entirely new issues, but we are on a whole different playing field with how we are dealing with many of the things that are part of our lives.

I think that the advent of the on-line services business and of the Internet certainly is going to change the way that we communicate with each other, the way we educate our children, the way we shop, the way we work, the way we meet people, the way we hold business meetings, the way we get information, and much more. And all of that is happening at such a rapid pace that it is certainly causing the dislocation that many of us have felt in other areas of the law and regulation right now, as we speak.

I come from the software industry into the on-line services business. And as a software lawyer, I lived through the struggle that we had trying to make the copyright law fit with computer software. No one knew whether software was subject to copyright and how it was going to work. There is still litigation going on as to exactly what it means when you say that your software is protected by copyright. And that is really only a very small example of the kind of problems that we are facing in the on-line services business now, trying to understand how the law applies to us.

When I hire new lawyers to come on my staff, they usually say to me, "You know, I have a communications background. I have a software background. I don't know anything, or I know very little, about the on-line services business, and I know very little about the Internet." And I just tell them not to worry, because after they have read both cases<sup>(2)</sup> they know as much as anybody. And that is all there is. But there are many more being generated, really, as we speak.

One thing that I think we have to keep in mind as we try and examine these questions today is really the rate of growth of this business. When I joined AOL, which was in October 1993, there were about 300,000 subscribers to the service. We had about 250 employees, and I was the first lawyer. Now, not quite eighteen months later, we have more than two million subscribers. We have about 1400 employees. And I have a legal staff of twelve. So in less than eighteen months, the company and its legal posture have dramatically grown, and we know we are in the bottom of the first inning in terms of where this media is going.

We have only 7 percent of the households in the United States who subscribe to any on-line service, and this is about to become a consumer medium. This is going to be in everybody's house. It is going to be on your Personal Data Assistant (PDA), on your television, and on your computer. There will be lots of channels. There will be lots of networks. There will be all kinds of platforms. But this kind of access to both content and communication will be all around us.

The kinds of things that we have on our service at AOL, are instructive for trying to examine our issues about whether this is really new. One thing we have on AOL is private e-mail. I am sure most of you have had the experience of sending e-mail at least within your organization. And of course, AOL provides the ability to send e-mail out across the Internet to any number of organizations and individuals all over the world. This is really the equivalent of sending a first-class letter. It is private. We have a contract with our users, which we call our terms of service, which basically says, "We don't read your e-mail. We don't look at it for any reason at all. We don't control it. It is as private as if you had written it and put it in an envelope and sealed it and mailed it." That concept bumped heads directly with current legislation proposed right now, for instance, by Senator Exon (D-Neb.), who has proposed that the sending of pornographic and other kinds of lewd and lascivious content should have criminal penalties attached.<sup>(3)</sup> The very transmission of content of that nature would have criminal penalties attached. Of course, that is very hard to combine with the concept of private e-mail on an on-line service.

We also have public and private real-time chat areas, conferencing, celebrity symposiums, and on-line classes—large groups of people communicating in real-time together in very public forums on-line. There is really no ability to control the content in those kinds of instances at all. Yet we have cases like the *Frena*<sup>(4)</sup> case and the *Cubby v. CompuServe*<sup>(5)</sup> case, where there have been real lawsuits filed against on-line service providers, alleging that somehow they have liability for the content—be it under the defamation laws or under the copyright laws.

Those cases go in two different directions. The *Cubby* case basically held that CompuServe was not liable for defamatory—allegedly

defamatory—content that was transmitted in an area monitored and controlled by one of their information providers. But that does not really answer the question, of course. The real question is: Is that information provider liable? And that case never reached that issue.

The case was a copyright infringement case where the district court in Florida held that there was absolute liability—strict liability—under the copyright law. The owner of a bulletin board on which were uploaded a bunch of *Playboy* centerfolds was found to have transmitted them in violation of *Playboy's* copyright. So the law is not in a logical place and not in a place where, if you are practicing in this area every day, you don't have any meaningful guidance.

We also have things like interactive magazines on-line, *Time Magazine*, for instance, and *Atlantic Monthly*, and newspapers like *The New York Times*, *Chicago Tribune*, and *San Jose Mercury News*. We have bulletin boards and clubs. We have 200,000 software files available for downloading. We have computer support areas. We have electronic shopping services. And we have more and more comprehensive access to the Internet. All of this going on and growing at such a fast rate raises enormous problems in terms of determining who should be liable for what and how liability should be established.

One story I like to tell arose in the defamation area. A lawyer from a very reputable law firm in the Midwest wrote me and said, "I want you to take off this posting on one of your bulletin boards that someone put on that basically says my client's dog food is composed of the chopped bodies of little animals."

And this guy had said, "Don't feed this dog food to your dogs, because that's what's in it."

So I get this letter, and I thought, "What is dog food? What is in dog food? It is the chopped bodies of some animals."

That statement may be true. I don't know if it is true or not, and I am really not in a position to know. I cannot be, as the general counsel of AOL, the judge and the jury here about whether this statement is defamatory or not. Under the current state of the defamation law, if I have knowledge that that is defamatory, I have to take it off my service, or I am liable. And I thought about that. The problem with taking a statement like that off is that I also have a contract with the person who put it up. They pay me \$9.95 a month for their five hours, and they have a right to put up, under our terms of service, whatever content they think they want to put up, as long as it does not violate the terms of service.

So basically, I said, "The defamation law just doesn't work here. Taking this down really isn't the right answer. I'm dealing with a new medium. I have a better answer here."

And so I sent this lawyer a free starter kit, and I said, "Here's ten free hours. You can get on AOL and tell them what is in your dog food."

That is the answer, but it is not really the technically correct legal answer. And it is those kinds of issues, that we really have to struggle with, that we really need to get the law to take that next step, and fit the facts, and fit this tremendous new medium.

Mr. Kahin: I want to generally go over the same question in somewhat different terms, that is to say, what is really different about what is going on. Is this something other than more, better, faster? Is it more than simply a refocusing on information law as opposed to communications law? And I would submit that there is quite a bit of structural difference here, and we are just beginning to understand what it is all about.

I first want to describe it in terms of convergence. There are three kinds of convergence: technological convergence, market convergence, and policy convergence. And I think they are being driven more or less in that order. The technological convergence is driving market convergence, and policy convergence, or legal convergence, comes last.

(Figure 1)

So first, I talk about technological convergence. Here are some aspects of technological convergence. One is convergence at the bit level—the fact that you can put all different kinds of content through the same digital pipe (or on the same digital medium, like a CD-ROM). Now this is very important for understanding the economics of communication and information dissemination, especially in the on-line world, where there is, at the present, a very real bandwidth constraint. Generally speaking, without getting into compression, voice occupies 100 times as much bandwidth as text in ASCII form, and video occupies about 100 times as much bandwidth as voice.

Now, what this explains first is the incredible growth of the Internet, which has been largely text-driven in the past in terms of the number of uses. It also explains the paradox that communications companies face if they are going to build an infrastructure—an integrated services digital infrastructure—in which video is affordable. What has driven the Internet is that in the infrastructure built for voice, text is virtually free. And in an infrastructure built for video, then voice becomes virtually free.

The second point of convergence is multimedia, the fact that you can merge different formats, graphics, text, video, and sound, all in the same delivery medium or delivery system.

Third, the convergence of content and function; that is, you can actually use computer functionality to control the display or use of content, multimedia, and interactive multimedia. The breakdown between

point-to-point communications and broadcasting, and the breakdown between two-way and one-way communications, these sort of go together.

The World Wide Web shows how information can be posted for retrieval in one place and can be universally available real-time and nonreal-time.

We just do not have structural models like that in the old world of conduit and content—the pipe and what goes through the pipe. That is one reason why the superhighway metaphor is so terribly misleading, because it assumes a separation of the conduit from the content.

Under a client-server model, you do not have to have the functionality in the network. In fact, the most efficient way to develop an advanced information infrastructure is to split the functionality between the end user and the server, where the information is. Looking at the Internet, you can see there is very little intelligence—very little functionality in the network. The functionality and intelligence are all in the information. It is in the information that is carried in the packets and in the mail headers for the information in HTML that links a web server to other web servers.

(Figure 2)

This is a very simplified picture of market convergence. We have different layers in the information infrastructure. In fact, you can see three different kinds of layering here, going from content to conduit on the left-hand side, going from computers to conduit across the top, and computers to telecommunications over in the lower right-hand corner.

Different kinds of services occupy different places in this logical infrastructure. The superhighway model is really just down here at the lower left. The dimension of imbedded functionality—that ends over here in the computer—does not exist in traditional models.

The most interesting issues are right in the middle. Each one of these areas exists in a somewhat different policy and legal environment. It is not just a matter of understanding what those different environments are, because those are all traditional environments. What happens in advanced information infrastructure is these areas interact with each other much more.

Finally, there is policy convergence.

(Figure 3)

First, intradomain convergence, such as cable/telco/broadcaster/publisher convergence, has actually been around for a long time. Ithiel de Sola Pool wrote about it very eloquently in *Technologies of Freedom*.<sup>(6)</sup> Second, the convergence of intellectual property regimes has been around a long time in computer software. We have been dealing with it for fifteen, twenty years or more.

We now get into interdomain convergence, including the convergence between the different kinds of policy domains that you see in the government. This is very visible in the organization of the Information Infrastructure Task Force (IITF or Task Force), where you see operational issues of the government's own infrastructure—the way the government deals with its own information—side by side with strategic investment issues—National Science Foundation and Advanced Research Projects Agency funding to advance information infrastructure—side by side with regulatory issues in telecommunications policy, and legal issues like intellectual property.

(Figure 4)

There is also the interdomain convergence in the convergence between standards and intellectual property policy, which goes on in a very abstract level that few people understand. And in my opinion, the Information Infrastructure Task Force is not adequately set up to deal with this, because intellectual property is compartmentalized in one area and standards are put in other areas.

There are some very tough issues between copyright and patent, on the one hand, and the widely recognized desire in

the technological community for interoperability, on the other hand. There are all sorts of ways of dealing with this interaction. It is partly a matter of intellectual property law. It is partly a matter of what the role of the government is in encouraging and helping coordinate standards development. And it has a lot to do with industry attitudes towards the development of standards and industry attitudes for intellectual property and with the government's own involvement in setting standards as part of its procurement process.

Ms. Branscomb: The first question: Are the issues different? No, they are not different. I think we are seeing the same issues that we have seen historically over and over, but they are arising in a different context in which we may need to find different solutions than we have used in the past.

I think what computer networking offers is a much faster, quicker global reach of many people to many people, whereas in telephony or in the mail service, we really had point-to-point communications. Furthermore in the broadcast media, we have one person to many people, although we are developing interactive services in the talk shows and electronic panel mediums, and so forth.

In the Internet environment or America Online or Prodigy or the other commercial on-line services, we are finding a very democratic discourse in which we do not have to go through intermediaries to get our message into that marketplace of ideas, which is really the profound philosophical root of our information and communications policy in this country. So there is a real question as to how we preserve that sort of seedbed of democratic discourse which really offers a very different opportunity for a more egalitarian entry into the exchange of content and discussion of public issues.

Now, what are some of the differences that we are seeing arising with some of the problems that we dealt with before? First, we have a very strong clash of cultures. We used to go to a library when we were looking for free access to books or printed materials, whereas we always have paid to go to the movies. They have not been free. So we have really very different concepts of when we pay for something and when we give it away. Now we go to the Internet, both to find things that we used to find in the library, and we are also expecting to find movies. And the people who have always charged for access to information are really in quite a quandary as to how to handle the situation, and you will find the commercial interest coming onto the Internet or making available things for free. It looks more like a come-on. I have looked at *Southern Living*, for example, on the Time.com page because I happen to receive it. So I knew what the content was. And they give you just enough to try to capture your interest so maybe you will subscribe.

But we are really moving to a much different environment, which I think John Barlow(7) says, "Well, all the intellectual property laws are dead, and everything you ever learned is wrong." Lance Rose has just written a response in last month's *Wired*, which says, "The return of the Ludditar," in which he describes how intellectual property laws are alive and well, and will continue to help us solve some of these problems.(8)

But the recent issue of *BusinessWeek* also describes the technology paradox, that the information software people are finding that they have to give the software away in order to establish a longer-range confidential relationship and a group who support them through add-ons, and services, and so forth.

So we have to think of this environment somewhat differently, and we have a problem of deciding what really should be in the public domain and what should be in the private domain. And that is why I find the concept of information as property useful, because it looks upon public domain property not as something that is just out there for the taking, but something in which someone has to take responsibility for management, control, quality, distribution, and so forth. It is not free, and what was in the library was never free. It was just supported by public funds—taxes or contributions.

Now, the second area in which I think things are different—other than the ones that Ellen has already mentioned—the fact is that you have multifaceted types of communication in the same stream. It is difficult to tell which is which. The problems of the right of reply need to be revisited, because both George Perry(9) and Ellen have suggested that that is the only way they see how to handle the problem of defamatory material, even though it has been rejected for newspapers and broadcasters.

Now, in the copyright area, I think one of the main problems is that copyright is an oxymoron in the computerized environment because to use a computer you have to copy. You have to copy to screen. You make a backup copy to

start. Everything you do is copying. So it seems ridiculous to have a copyright law that is applied to something in which you really want to encourage copying. To deal in a networked environment, things have to work together, and you have to be able to copy others. Now, in order to accommodate that, the courts are going in the wrong direction, because in the most recent cases, as Ellen has indicated, everybody looking at copyright software law is very confused at this point.

Just to give you an historical footnote, it really is a happy accident of history that we have copyright for software in any event. As I understand it, John Hersey(10), wrote a very brilliant defense saying that this is really a utilitarian kind of a medium and not like artistic works and writings. Apparently he lost his temper, and Arthur Miller(11), whom you know from watching him on television, was very persuasive, and he won the argument. So that is why we have software under copyright, because the Patent Office did not want to touch it with a ten-foot pole because it knew it did not have anybody competent to examine the state-of-the-art. And it was overworked anyway.

Most of the software houses were in fact relying upon trade secrets. So we have a very complicated area now in which the cases are now saying that reverse engineering is okay, if you have to find the underlying code in order to be able to write a compatible piece of software.

Well, that, to me, is really taking without compensation. Now, the Fifth Amendment says the government cannot take your property without compensation. But, apparently, the way the copyright Fair Use Doctrine is going, it is okay for the private sector to take your property without compensation. And the Supreme Court has said that facts are not protected. And what many of us are really concerned about is the fact that computers are taking information from us about our names, addresses, telephone numbers, transaction-generated information—and selling it and marketing it without our knowledge and consent.

Now, the third area in which we have a problem with an old issue is with pornography. I happened to be writing a law review comment for the *Georgetown Law Journal*(12) in May on the Carnegie Mellon study on the very large amount of traffic in pornographic images on the information superhighway.(13) And I asked Martin Rimm why on earth he did the study in the first place.

I said, "Curiosity?"

And he said, "Right. Why did you decide to write a comment?"

And I said, "Curiosity. They would not let me read the study unless I agreed to write the comment."

But in any event, the whole question of what is obscenity and how we apply the First Amendment to this new electronic environment, is a major question we see arising and going into the courts at this point.

One question that is a very interesting one to me is that you are really accessing this material in your home at a computer. It is one of the attractions. Nobody sees you going into the store that sells the pornographic images. So it is really a very private transaction. And one wonders if *Stanley v. Georgia*(14) should not apply, saying that what occurs in your own home is really private, and that is a choice up to you.

The case that we see going through the courts is the Amateur Action case(15) out of Memphis, Tennessee, where the pornographic images were obscene images, as they were held to be by a Memphis jury, and were uploaded in San Francisco and downloaded in Memphis. The prosecutors chose Memphis, because it is in the Bible Belt, and local community standards are the legal rubric under which we apply what we consider to be obscene.

Many of us feel that the virtual community should be the community of choice. If members are consenting adults transferring information over an electronic channel, they should make the choice of what kind of environment they would like to maintain, and they should be able to maintain some autonomy over it.

I must confess, after reading Martin Rimm's study of pornographic images on the Internet,(16) I am a little concerned about protecting Amateur Action from this concept of the virtual community. The largest number of Martin Rimm's examples come from Amateur Action's images on the Internet subscription service. Justice Stewart, said, "I can't

describe it, but I know it when I see it."(17) And I have the feeling that if that case gets to the Supreme Court, the Supreme Court Justices may take a look at Amateur Action's images and say, "I know it when I see it."

Perhaps, we should have a standard that is no longer in either the virtual community or the local community, but we can say we know it and that is it. So we may have a case that goes in the wrong direction from the way First Amendment lawyers would like to see it go.

The last area I would like to mention is advertising, and the question of spamming on the Internet. It is not a new issue in the sense that we have spamming in our mailboxes, and a lot of us do not like it. Do you know what spamming is? It is throwing spam at a fan, and it goes in all directions.

The Canter and Siegel couple out in Phoenix were advertising their services with the green card lottery. They put their messages into a large number of usenet groups, and these are often cross post. So many people were getting dozens of these ads in their own personal e-mail. As one person said, "Well, it's like opening your mailbox and discovering dozens of letters with postage due."(18) It has a quite different impact on-line. Many of us do not like having to throw a lot of this mail into wastepaper baskets, and some of us who are environmentalists say we are cutting down a lot of trees that we don't need to cut, because the electronic environment would provide access to advertisements. It does now on the World Wide Web. So there is an opportunity for commercial interests to have a place in this electronic environment that does not require them to spam your individual mailboxes and interfere with usenet groups, which really are often professional content, and advertisements are an unwelcome interruption.

We have to determine how we are going to handle this kind of situation. We can say this is a situation that just will not work. In the 1920s, all the broadcasters said, "Well, this system doesn't work. Everybody is talking on all these channels and nobody can hear anybody." I think we may come to the point of having to say we have to take a different look at the way the First Amendment applies in the electronic environment.

Mr. Cate: We have now two dozen or more issues on the table. It is difficult to know which one to follow. I would like to ask one question, and I would like to start with you, Ellen, since you raised this issue. If there are only two cases out there, what is it your twelve lawyers are doing?

Ms. Kirsh: The first thing is that we do a lot of contract work, because we are taking information that is owned by information providers and entering into agreements with them to put their content on our service. That is a strictly commercial transaction. You put your content on our service. We give you the opportunity to do that. We have a revenue-sharing formula which allows for the division of the revenues that are generated by the people using the service. That is a big piece of it.

We also have a lot of intellectual property law issues, and I have just recently hired somebody to do that, because we own a company called ANS, which actually built the telecommunications infrastructure for the Internet. So I am learning about things like T1 and T3 lines and modems and racks of modems and co-agreements. You guys probably all know these things, but this is new to a computer lawyer.

We have all of that. We have trademarks. We have a new international division. We just announced it. We have done a joint venture with a German company called Bertelsmann,(19) and we will take our AOL service and make it work in Europe. And we intend to also do that in Japan this year. So I have actually just offered someone a job to do that. It raises enormous issues about exports and about intellectual property.

Mr. Cate: I am just interested in following up on the first point you made about contracts. You have contracts with your users. You have contracts with your suppliers. To what extent are the issues that you are facing dealt with simply by those contracts?

Ms. Kirsh: I try to deal with the liability issues in the contracts. It is obvious that a company like America Online is not really in charge of the content that *The New York Times* puts on our service, for instance, or *BusinessWeek* or *Omni Magazine*. Those information providers are the ones that actually put the content on the area and also have the responsibility to maintain the interactive parts of their service.

We do have a contract which is basically a standard form and gives them those responsibilities and gives the liabilities that result from their areas. Should copyright infringement or defamation or some crime of any nature be committed in their area, we expect them to be the ones to take control of that situation and to remedy it. Whether that works in terms of the allocation of liability ultimately, no one really knows. That is really something which is going to continue to get litigated.

But I think the right answer is that the person that is responsible for the bad deed ought to be the one that has the liability. And that is the ultimate subscriber who is doing that bad act. It is really inappropriate to hold AOL or its information provider responsible for content over which they really have no control.

On the other side of the equation, of course, if it is a publisher who has the ability to screen content before they put it up, then they are much more in the traditional publisher role. And I think the answer is different there. But it really requires micro-analysis of what is on this service and who has specifically done whatever the issue is.

Mr. Kahin: I guess I was struck by the phrase "has the ability to screen." That seems to suggest that the law should turn on that ability to screen.

Ms. Kirsh: We do not have the technological ability to screen at all. There are software programs that you can use that will, delete the top ten dirty words or something. But other than that kind of very simplistic and inappropriate kind of screening on as diverse a service as we have, there really isn't the ability to screen. And I think that the liability really ought to turn on who is it that has violated the law, not on what kind of controls you have, because that will really be a detriment to the development of the medium.

Mr. Kahin: Do you carry all the usenet groups?

Ms. Kirsh: No.

Mr. Cate: Then how do you make the choices? I do not mean how specifically. I mean what controls are there?

Ms. Kirsh: We have a terms of service, which is essentially our contract with our users. And we basically have said to the users, "This is the kind of thing you are going to find on AOL, and this is what we think is inappropriate as a private company." So we do not offer in our menu on the Internet some of the usenet groups which we think would really violate terms of service.

It does not mean that our users cannot have access to those groups, but they have to go out and voluntarily elect to get access to those groups themselves. If they want alt.sex.foot.fetish, they can have it. But we are not going to put it in the menu, because we think that that is inappropriate for the kind of service that we want to make available.

Ms. Branscomb: You mean, you provide open gateways so they can go out and find it?

Ms. Kirsh: They can go get it.

Ms. Branscomb: You just do not make it easy for them.

Ms. Kirsh: That's right. That is exactly right. We do not in any way attempt to censor or monitor what people do, but at the same time, we are trying to strike that balance between being a consumer-oriented service with lots of kids and a wide-range of people and also making available what there is out there for people who want it. And it is a real balance that we have to strike.

Ms. Branscomb: It is technically possible to screen some of these things, but it would put a terrible economic burden on the provider. And I think that many bulletin board systems, just for an example, which are very low-cost operators, would really be excluded if they had to be responsible for the content.

Now, Ellen can say, "Well, let's put the responsibility on the person who creates the problem." The difficulty is that it is usually someone who is judgment-proof. So someone who is injured is going to seek the party that has the largest

amount of money, and that is AOL or Prodigy or CompuServe. There is nobody in the Internet you can really hold responsible. I suppose the manager of the college systems, for example, could be held responsible. Perhaps, that is one of the reasons that M.I.T. turned David LaMacchia over to the Feds instead of just chastising him, for fear someone would hold them responsible for copyright infringement and the bulletin board he provided on M.I.T.'s computers.(20)

But I think the real question is: "Are we going to provide a common carrier environment somewhere in this electronic distribution of information?" Those we have held to be common carriers are now seeking to be information providers. Once they become information providers, are they still common carriers? I think it is a question that really has not been addressed directly. As we look toward the content, which is the valuable asset today, what are we going to do about it?

The information providers do not want to be common carriers. A Prodigy or an AOL may want to provide a certain kind of environment in which they can sell some safety to their subscribers. And I think there is a real question as to where that common carrier concept resides.

Mr. Kahin: I think they want to do both. And what I see AOL doing is acting like a conduit to the Internet and acting as a carrier in that context, but editing some of the newsgroups that it is placing on its own servers. And it is serving a little bit like a publisher in that context.

Ms. Kirsh: Well, I do not think we are really serving as a publisher.

Mr. Kahin: You were selecting which newsgroups to carry.

Ms. Kirsh: We are selecting, but we are also saying that if you want to select more, you can. We actually make every news group available. So the only thing we do is have different levels of availability and accessibility, because we need to balance the broad, diverse interests and the kinds of people that are on our service. We really are not interested in putting things on in an obvious way that would be obviously offensive to our users.

Mr. Kahin: But you carry all the newsgroups on your own servers?

Ms. Kirsh: They are all accessible on our service, but some of them you need to go out and get yourself. And you add it to your menu, and then you know what—it is on there.

I think the bottom line here is that we need to really have a whole new category of being, that we are not a common carrier, we are not a publisher. We are something that is really unique, and we need to come up with a new classification that really fits this new medium. It does not work in any of the current boxes. And I think that is really the problem.

Mr. Cate: Let's focus on this issue for a moment. Brian, you explicitly used the word "convergence," but it seems everyone is talking about the extent to which the issues are being presented in new and different ways, either because they are crossing over between disciplines or industries, or because they have been presented in a global environment, so that we see different kinds of issues coming together. And you also said at present this is not being dealt with adequately, at least a metaset of issues by the Task Force process or by the Administration.

What more can we say about convergence and the extent to which we are seeing new issues, even if they are old issues simply in a new context? Are we stuck? Is there going to be a forward-looking solution? Are we just going to have to wait for the next Supreme Court case?

Mr. Nugent: I think in many cases the various players are working it out themselves. I think the emphasis on contracts tends to underscore the issues of who owns the data and who owns the software being created. If I make myself available over the Internet, what do I own? What does the Internet own? What does the customer retain? All those issues are being hammered out, and I think that is the way it is going to go. I think we will have some litigation along the way. I do not see Congress being able to catch up with some metalaw that governs this. I cannot imagine a classification scheme coming out of any one agency that would even fit. With the emphasis on contractual undertakings between vendors and customers, and vendors and vendors—vendors and telephone companies are really

putting out the ground rules here.

And we are finding more and more that we are fighting very hard on intellectual property issues and on security issues. Those two are the top issues in the Information Age for us as commercial providers, because security is a large, large issue. And that in turn affects who is liable for damages. That in turn affects whether we can represent to the consumer that what is done is a secure product with integrity—and then, who owns the various information components.

Mr. Cate: What about those issues that involve third parties to whom we do not have contractual relations?

Mr. Kahin: I think making a point about contracts is extremely important, because I think we will see an incredible resurgence of private law in this area, partly because of the uncertainties, but also because this whole environment enables the creation—the rapid creation—and the rapid deconstruction of enterprises that are privately defined. And we need private law to define those enterprises and what the relationships between the parties to those enterprises are.

However, this does not ultimately address the public law context. Over the long run, I certainly end up agreeing partly with John Perry Barlow, more than I expected I would, that the classical notion of property does tend to break down in the intellectual property area, because of the uncertainty of defining what the property is and because of the ease in which it can be replicated. So what I predict is, over the long term, we will see intellectual property become more tortlike simply because we cannot sustain a consensus on what the property is.

Mr. Nugent: What do you mean by "tortlike?"

Mr. Kahin: That violations will be more focused on human behavior and not whether this abstract delineation of property rights was properly fixed or was violated in some way.

Ms. Kirsh: Like sort of a negligence analysis, is that what you are saying?

Mr. Kahin: Well, not just negligence. Negligence-like analysis, that there will be some duties incurred in a violation of those duties having occurred in other ways. And I think you could see this in copyright with exactly the problem that you are facing. And you can put it in terms of what sort of behavior should we expect of America Online or anyone else. In the patent context, it is very different, and that is because of the problems of defining what is patentable subject matter.

I am curious about your experience in the banking area, because I have heard that there are some extremely broad patents in the financial services area and a lot of ambiguity within the financial services community about whether it wants to deal with patents. And the fact is that in the Patent Office, we certainly do not have any MBAs in the examining corps. They are electrical engineers trying to draw property lines by the seat of their pants.

Mr. Nugent: In the intellectual property area, what you are seeing is players coming into the marketplace with very broad patents in the financial systems area, the electronic currency area, the electronic money area, and also the information systems area. It is alarming to see, from the banking point of view, this happening because these are nontraditional competitors. This is Microsoft coming in with a very broad patent. This is Nippon Telephone and Telegraph coming in with a patent on electronic money. This is On-line Resources coming out of McLean, Virginia, with a patent on home banking via ATMs or ATM networks. And all of these patents are very broad and overreaching.

All of these players are coming in and saying, "We own the system—the method—by which the Information Age is conducting itself, by which transactions will occur, and by which payments will be effectuated." And you have them wheeling and dealing between the parties and litigation. You have settlements. You have contracts being negotiated back and forth.

You are going to see this happen just like it did in the automobile industry, the chemical industry, and the engineering industry, where patent positions were maintained. Then there are dramatic cross-licensing agreements. A lot of small companies were kicked out. There are a lot of small companies that did not protect themselves. That is going to happen here.

What you are seeing is an infrastructure develop, an information system develop an Information Age. Intellectual property is, in many ways, going to be setting the ground rules and determining who the players are because of these patents. It is profound, I think.

Mr. Kahin: Do you think it is a good thing?

Mr. Nugent: I don't know. I think those who can arm themselves, those who get the patents, and those who have the money to do it will win.

Mr. Kahin: Well, that sounds like warfare.

Mr. Nugent: That sounds like warfare. I think in many respects we are in an economic or information warfare of a different kind, where the ground rules are being set through contracts and intellectual property. The government regulators are trying to catch up. They are able to say a few things with respect to privacy and get some broad rules set out through the NII privacy rules or the European Union privacy rules.

Mr. Cate: But how about in the intellectual property environment? You have the Green Paper—the Lehman report(21)—which, while saying it is only a minor tinkering with already widely accepted legal structures, assumes a great deal of law on which there is not a lot of agreement and also proposes a great deal of law, much of which would strengthen the hand of information owners.

Mr. Kahin: And it ignores a whole set of issues that are very much involved with information infrastructure development because of the patent issues.

Mr. Nugent: I think the Lehman position is not criticizing that position—the clear position—but I think what they are saying is that these software system patents are too broad and counterproductive. But the fact of the matter is, the law is developed very well in this regard.

Mr. Kahin: Oh no, no! We have had five cases come down about software patents this last year that leave the law no clearer than it was.(22)

Mr. Nugent: But the Supreme Court has also said software systems are patentable. Our holdings are patentable.

Mr. Kahin: No, they did not say that. It said that in an otherwise patentable physical process, the presence of an algorithm—a mathematical algorithm—does not make it unpatentable. The Supreme Court has only reviewed two patent cases in the last ten years. So all of the patent cases are ultimately decided by the Court of Appeals for the Federal Circuit. The idea of setting up the Court of Appeals for the Federal Circuit back in 1981(23) was that at least we would have some consistency among the circuit courts. What we did not anticipate was that we would have deep divisions within the court, and particularly in this area, over what is patentable subject matter.

Mr. Nugent: And more patents.

Mr. Kahin: And more patents, right.

Ms. Kirsh: I do not think we should dismiss the regulation and the government action that is ongoing now. One of the people on my legal staff is a government affairs person, because we are being studied by the Federal Trade Commission, the Federal Communications Commission, probably ten senators, and probably nine or more congressmen. Plus, in all of the states, there are many, many proposed pieces of legislation which would have dramatic impacts on our business and our ability to continue to conduct business.

There is a huge ongoing effort to try and figure out what to do about operating in many places in the government without a lot of the facts that they need and this is creating enormous problems for us and making us spend a lot of time and money trying to fix it.

One of the things I have tried to do is to get our industry to work together on some of these educational issues, because

I think it is the only way that we are going to get coherent legislation in some of these areas. And I think it is inevitable that we will get some and possibly that we will also get regulation.

Mr. Cate: Is legislation the operable word?

Ms. Kirsh: No.

Mr. Kahin: There is a lot of activity.

Ms. Branscomb: I just wanted to make one more comment. If you are correct that two-thirds of the people in this country are earning their bread and keep, either from inputting information or installing hardware or distributing it, then we are not going to give up legal rights to what is our most valuable resource. Even though the patent law may be overreaching and that may not be the right way to handle software, we are not going to live in a society in which all information assets are free.

In fact, I was very amused that Max Frankel, a couple weeks ago, wrote his piece in the *New York Times Magazine*(24) in which he kindly mentioned my book(25) as a source of his inspiration. I don't think he realized where it was taking him, because he said when public-opinion pollsters call him up, he declines to respond.

He says, "No pay, no say."

And one of my legal colleagues wrote me a letter about this, and he said, "Well, what is Max Frankel going to do when he calls his sources and they say, 'No pay, no say'?"

But I think we are going to devise methods for organizing how we exchange information. And just two interesting little factoids as CNN calls them: There are twenty-five of the largest universities—they're supposed to be the depository of free information or knowledge available to all of us—which are working madly to figure out how they can, in the electronic environment, derive income from exchanging their valuable information resources. And as you no doubt know, there are all these efforts to devise digital cash, making possible business-like transactions paying for information exchanges on computer networks.

So I think my own view is that case-by-case decision does not render good public policy, because it depends on the particular equities of the particular cases. And I just happened to read, last week, Paul Goldstein's book on copyright,(26) which gives wonderful background of the politics of a lot of these decisions. If you look at what happened in the *Wilkins* case,(27) for example, Wilkins could not have made a poorer choice of circumstances to get what he wanted out of the courts, because the case dealt with medical information and the National Library of Medicine with an area in which we all want access to medical information, and the researchers are supported by the federal government. They pay for the price of putting that material into print.

So what Wilkins really owned and was trying to protect was very small, and, yet, it was an issue that became an overall principle that prevents a lot of other publishers from deriving adequate income from their information products. We may not look upon the legislative branch as being the best avenue, but I think it may be our only hope in terms of structuring our overall public policy that looks at all the issues and tries to arrive at some reasonable, equitable solutions.

Mr. Cate: Then let me ask you the exact same question I asked Ellen. Is the legislature, as opposed to the NII Task Force or the Administration, where you would be looking for the better public policy?

Ms. Branscomb: Well, the executive is supposed to propose legislation. This is part of the process.

Mr. Cate: But, it is not exactly the way it has thus far been happening in this area.

Ms. Branscomb: Well, they have not issued their report yet. They are still in the process. I have lots of problems with the process. Part of the problem is that there is no consensus yet. We do not pass laws until there is some kind of consensus in society about what is right and what is wrong. And we really are at odds with each other, so we have not

reached that consensus yet. And it may be a while before we come to it.

Mr. Cate: Ron, what is going on?

Ron Plesser:(28) Anne's last point is a great point, because I think legislation—we like to think—follows consensus, but I don't think it always does. The Cable Act of 1984(29) has a very extensive privacy set of controls on two-way privacy. And really, there is no consensus back there. It was ahead of technology. Usually technology is ahead of the law. Sometimes, once in a while, the law gets ahead of technology.

This is a hot area. There is a lot of interest in it—the people in this room, people from Europe, and the newspapers. Legislators are no dummies. They see an issue that has a great deal of interest—a great deal of political interest among the public, among companies, and corporations. And so they are going to get in the act.

Ellen, I think, was referring to legislation in the state of Maryland which was introduced, that essentially would set down an affirmative-consent requirement every time an on-line company wanted to transfer information that would require affirmative consent. Those are the kinds of things that I think the industry has to watch.

On the federal level, the excellent amendment has been described adequately here. It would essentially extend the Helms legislation on telephones to telecommunications devices and clearly would attempt to hold people responsible whose facilities were used in transmitting information. We see a major legislative overhaul of the 1934 Act,(30) regarding the whole issue of competition—who is going to provide those facilities.

But the whole issue of congressional policy to stimulate competition and take away some of the old restrictions—some of it is good news. Some of it may be awful news. You are going to have very concentrated companies now being able to participate in all aspects of this, and that is going to create change. But it is a very active legislative time.

If I had my vote, though, I would vote the other way, different from Anne. I would like incremental change than Congress change. Courts may scare you, but Congress can equally scare you, and I think it is probably a combination. But I think that the *Playboy* case(31) and the *Cubby* case(32) are interesting. They followed the traditional law in the areas that Congress had established. In copyright, there is no intentionality required, but in defamation, there is. Those courts really just extended those concepts. I think they essentially—I do not want to say they were—but they were the policy—consistent policy—that we have had. Congress certainly is going to become a major player.

Ms. Branscomb: But the legislation is incremental. We have been changing the copyright law for the last ten years. Every session of Congress seems to pass something. We change the rental rights. We have changed all sorts of things. So legislation is not necessarily an overall, overarching piece of legislation.

And I know the lawyers will argue and say, "Well, we can't handle a new law because it takes so long to get the wrinkles out of it." But it is taking an awfully long time to get the wrinkles out of copyright coverage for software through the courts. That is a very long process, also, and it does not necessarily come out with answers that are workable.

Mr. Plesser: It is going to be evolutionary, I think, in a year. We have to come up with a new concept. I think everybody commented that the common carrier does not work. Publisher does not work. I think that the legal community, the commercial community, and the academic community really need to get together to see if we can further develop a concept that really works in this environment.

Mr. Cate: What about this new concept? A new concept to do what? Why do we need it, and what is it trying to accomplish?

Ms. Kirsh: I think we need to figure out a structure—a new definition—that covers an on-line service concept. We are a different kind of player. We're not a publisher. We're not a common carrier. We're not a distributor, really. We're something that involves components of all of those things. And the law typically develops in such a way that the benefit from whatever these types of entities has to deliver, can get delivered in a safe, commercially acceptable way.

We need to be able to, as an on-line service provider, understand where our legal risks are, have fair legal risks imposed on us, be able to insure or otherwise assume those risks, and then understand what the game plan is so that we can conduct business in a way that is predictable. And we really can't do that the way the law is established now because there are so many unknowns, and there are so many unanswered questions.

So we really need to sit down and say: What kind of content do we have any control over? What should the liability be for that? What kind of content don't we have any control over? Who has it? Who's responsible? And this needs to really be global. This is Dave Johnson speaking not Ellen Kirsh, but I agree with him completely when he says that what we need is something that is akin to the international maritime law for cyberspace.(33)

We really need to have something that not only works in the United States, but works everywhere. And I think there are people who think this ought to be the purview of the United Nations. I don't think that's a bad idea. But it ought to be somebody who thinks about these issues globally.

Mr. Plesser: One of the top issues in the forwarding concept is the issue of anonymity. And I think for those of us who are involved with on-line service communication companies, the idea of forwarding works well if there is no anonymity, because we all know the deep-pockets issue. But essentially, if you can say, "Well, this person transmitted, or we forwarded this information, this is who was the author, and this is who originated it," I think that goes a long way.

The problem is when you're transmitting anonymous information that may invade somebody's privacy, be defamatory, be criminal, or be infringing, the question then is: What if you can't identify the author? This is a very hot button issue in the community where a lot of people feel that anonymity is really the beauty of the system, and that it should be maintained.

From my side of the street, anonymity is a real danger. It may be part of the reality, but it's the part that, really, then becomes a problem. Someone has to be responsible for pornography going up over the Net. It's not going to be acceptable to lawmakers and legislators to say the stuff is up here, and no one is responsible. That's just not going to finish the day. And the question is: If you allow anonymity, who else is it but the carrier that's going to be responsible? And I think the concept is that authors should have the responsibility. But if you allow that to go on anonymously, you cut the circle. And so I think that is one of the key issues.

Ms. Branscomb: I think there is not an "it." That's the problem. When Ellen says, "Let's define it," it is something different, because Ellen's operation is very different from the Internet, which is very different from bulletin boards. So I think there's not an "it" that you can define. There are all of these different levels of communication, many of which have to be treated differently.

I have been looking at it in terms of saying, if information is property, then we decide what is in the public domain. Is it a global public? Is it a national public? Is it some tribal group that owns this information? If it's private, is it a corporation that owns it? Is it an individual? What control do we have over it? If, instead of talking about copying and what is patented, and so forth and so on, we should talk about what kind of uses you make of the information, and there are six different kinds as I see it.

One is authorized uses, for which you license and receive royalties. There are mandated uses for which you must put the information into the public domain. Our births and our deaths are recorded; our houses are recorded. And there's a serious problem when those entities can put that into a Global Information System data set and sell it, and whether or not we have any control over it. But we are mandated to make available certain information. There are abuses, which I would say the criminal law has to handle, which are things which we prohibit and for which we provide criminal statutes. There are what I would call misuses, which are handled by the tort law, and misappropriation laws.

When Ellen says, "We're going to look at something slightly different from copyright," that's a sowing without a reaping, and it goes back a long way in our history. Whether or not the copyright law preempts it for states is a legal question which I'm not prepared to answer at the moment.

There are prohibited uses which are the taboos, such as how you handle pornography on the Internet. And then the

other area would be the tolerated uses, which are fair uses or "What do we permit without a license that we consider fair and proper?"

And I think that's the area that's really most confused at this point, as well as what the genuine taboos are, because there are lots of people that will say they should have access to all of those pornographic images and that nobody should interfere with it. I can tell you that I have discovered what the University of Pennsylvania does. They blocked one usenet group. It's one that's clearly pedophilic. And they have figured out, under Pennsylvania law, that they would be liable for transmitting images.

John Sturm:(34) I'd like to suggest to you that, based on what we've heard today, that I think everyone subscribes to the notion of convergence of information—some of the concepts that we've talked about today. I'd like to suggest to you that you need some convergence in structure at various levels, and perhaps it's a jurisdictional structure, before we may even have the ability to get to the answers to some of the questions that have been posed this morning.

I'll give you examples of three different levels. One is the corporate level; companies that are multimedia in various ways now. They have started with newspapers. They have broadcasting divisions. They have cable divisions. They publish magazines and books. They're in the on-line services, etc. The big struggle for these companies is to somehow blend these various businesses that have started out being channelized into a true multimedia company that can be successful in the future. And they're struggling internally with some of these same questions.

Two, you mentioned, Fred, at the beginning—the alphabet soup of government agencies—everybody with a little slice of jurisdiction over a different part of the questions we've been asking. And third—and this gets to the congressional level—it's just as big a problem there, because of the jurisdictional separations in Congress.

Just subtracting the politics for a moment, if you talk about answers and questions that were posed in this first hour or so this morning, you're implicating the jurisdiction of a whole host of congressional committees. And if you take it into cyberspace, I'll add three more.

And I'm suggesting to you that at some point in this process, we're going to have to find a different animal in order to resolve some of these interjurisdictional or cross jurisdictional questions before we can get to what I think will be a consensus answer to some of the questions we've raised this morning.

Adrian Cronauer:(35) I would suggest that what you were talking about the idea of what we can do and how we can rethink this whole structure—would have to go all the way back to pre-Gutenberg to understand that the whole purpose of all of this is to provide an incentive for creativity. And with new technologies coming along, we find ourselves mired in thinking that is based on what could be called horse-and-buggy paradigms. And when this new technology comes along, we don't know what to do with it because we are thinking in old modes.

Secondly, who we need to get into this debate are not so much lawyers and technologists of one sort or another, but rather, social scientists and group psychologists who will address the way that human nature drives people to deal with these new technologies, and how we can structure things so that as technology continues to evolve, we are able to still provide the incentives necessary for creative activity.

Mr. Cate: Let me follow up on that, if I may. Have we lost sight of the incentive in intellectual property law?

Ms. Branscomb: Well, I just want to clarify this. I don't think the motivation behind the Statute of Anne was the incentive to creativity. It was really to give control over the content. The creativity comes out of our Constitution. So it's a very American concept and very different from the way Europeans look upon natural right in the author, which is to be compensated and to have control over the integrity of the product, which we deleted. So it's not just incentive, although that, obviously, is a strong motivation.

Mr. Cronauer: I think you're dealing with two different things here. You're dealing with incentives to creativity, and you're also countering that the natural desire of power structures is to control information.

Ms. Branscomb: No. It's organizing an information marketplace. You don't have a marketplace without transactions

being compensated and people being paid for the work they're doing.

Mr. Cronauer: That's the incentive.

Ms. Branscomb: Most of us don't want to work in factories anymore. We'd rather be white-collar workers. And our work, therefore, is compensated in different ways. I think it's a mistake to look upon it just as incentives to creativity. That's one aspect. But it's also how we organize our work force and how we compensate people in an information economy for what they're doing.

Mr. Cronauer: Well, that's incentives.

Robert Frieden:(36) I'd like to turn us briefly back to common carriage. I'm struggling with whether common carriage as a concept is bankrupt or whether it's been contaminated. On the one hand, you look back at common carriage, and it goes back to British law—innkeepers, railroads, and what not. So it, to some degree, has passed the test of time. On the other hand, I'm persuaded that there are new circumstances, new contents, that are challenging the concept.

I'm just curious, for example—and there have been a number of examples that have been discussed today—but just looking at telephone companies and the concept of common carriage as a neutral conduit, I've been doing some research on an interesting topic called dial-a-porn. And well, participant observer analysis, of course. Having done some research, I found that notwithstanding the common carrier definition, telephone companies can assert business judgment as to whether carriage of this particular content would be somehow detrimental to the business affairs.

And I think that that kind of concept runs counter to the neutral conduit function. So my question is: Using that example or Citicorp, providing something that could be arguably common carriage or the functional equivalent of common carriage, or America Online, acquiring certain immunities by contract that otherwise would lie in a tariff or be subsumed in the definition of common carrier—whether we are just at the end of the road, as it were, with common carrier and it's bankrupt; or whether because of new situations, we're taking that concept and applying it in other contexts that wouldn't heretofore be considered common carriage?

And on the other hand, certain traditional common carriers, are vertically integrating—moving towards content and the like with an eye towards finding new profit centers, but also with an eye towards advocating that traditional common carrier role.

Mr. Kahin: I think, yes, the term "common carriage" has been dreadfully contaminated by rate regulation. And it will probably take a long time to get over that. We're seeing some new emphasis on nondiscriminatory access by competitive providers, obviously in the local loop, but also at the higher levels of information infrastructure, in the interconnection of different kinds of functionality. How do you ensure interoperability? How do you mandate interconnection to maximize competition? This runs into intellectual property issues and the general predisposition against any kind of compulsory licensing.

But in fact, depending on the scope of what is protected by patent and copyright, you may be able to erect barriers to interoperability that may need to be addressed through some kind of compulsory licensing, whether it's under the essential facilities doctrine or under some other approach.

Mr. Cate: Do any of the panelists have concerns about the continued viability of common carriage as a regulated category of communications provider? Has it run its course?

Mr. Nugent: I know as a company that tries to keep on regulating by telephone regulators, internationally and in the U.S., we avoid the common carriage categorization like the plague. There is a private carriage concept which may be more useful for companies that are interested in the carriage of data. But it baffles me that we're worried about that being a necessary predicate to insulation from liability. There are other ways of doing that. And I think the international aspects of becoming a common carrier are so formidable that one would not want to do that if one wanted to do business outside of the fifty states.

Ms. Kirsh: It seems like there are some concepts which make a lot of sense from the common carrier tradition, but they

need to be tailored to fit the current state of the facts that we have here. I'm thinking about universal access, for instance, which is a problem, because we don't have the means, the tools, the business model, or any of those things to make that work in my particular area of the world—in the on-line service industry.

We do have a big issue to address with regard to how we get everybody onto this information highway somehow or another. We haven't really talked about that very much here. But that, clearly, is an issue. But I think in terms of making the providers, the Internet, or anything a common carrier, that there are a lot of things that just don't fit and don't work. And so we need to figure that out.

Ms. Branscomb: We have tried other methods to provide this equity of access to democratic discourse, which is really a fundamental philosophy of why we want a common carrier system, or why we want a place where people can express their views. And that is the concept of the marketplace of ideas. We've used all sorts of different methodologies. The newspapers say the First Amendment protects only those who have enough money to own the press. Well, today, almost everybody can own a computer and a modem.(37) And at least we're moving in that direction.

So it's much cheaper now to own your own press and get into the system. But, where is the public forum that you can put your message into? And how do you get to it, if only large corporations control the gateways? And in cable, we tried to do it with the public, education, and government access channels, and with leased access channels, saying that, "If you provide a cable television system, you can't control everything. You've got to have something over here that anybody can get into."

We tried. That was what the Fairness Doctrine really was all about. If you have a scarce resource and the broadcaster controls it, then the broadcaster is a "publisher" and controls all of that content. Nonetheless, we still have Section 312,(38) which says, "You've got to provide access to candidates for federal office." We still have the personal attack rule. Section 315 is still in the Act.(39) But, the FCC decided it was unconstitutional and abandoned it.

What Ellen is saying is that, for defamation purposes we need a right of reply. The Supreme Court rejected it for both newspapers and for broadcasters.(40) But Ellen and George Perry are saying, "Well, what can we do except to give these people an opportunity to come into this environment and respond to what has been said against them?"

It seems to me that that seems to be workable. That's a voluntary thing. They aren't required to do it. But, we have to think in terms of how we establish public forums. Where is the public forum and where do we have that democratic discourse? It appears to be happening in the usenet groups on the Internet. Now, I don't know whether we're going to preserve this or not.

I had a very startling experience yesterday because I was attending a conference of sociologists—communications scholars who are looking at public spaces. James Beniger had written an article(41) in which he lauded the usenet groups in the Internet for providing this wonderful, open access, equitable access system of usenet and newsgroups.

And then he said, "But look at the icons coming onto the World Wide Web. Most of the icons throughout the world are American. We're going to be overwhelmed in the World Wide Web with the commercial interests that are going to take over this environment just as they've taken over broadcasting and newspapers."

So maybe he's right. It was sort of an alarming thought. What we need to focus on is: How do we protect an equitable access to the public forum?

Mr. Kahin: Internet service providers, in fact, do function as common carriers. But, nobody seems to think it's a big issue here. It varies from state to state, but the common law of common carriage probably survives the creation of the agencies that were set up to regulate common carriers.

Mr. Cate: Can we see a future, though, in which the universities, which today provide so much of the Internet access, say, "We're not providing access to certain types of speech" or "We're at least not going to list those usenet groups." And commercial providers say, looking at current defamation and obscenity laws, "We're not going to list those. We may have some sort of gateway that we're not closing off." Is there any fear on the panel of the closing of that public

space?

Mr. Kahin: Let me tie that into what I was just saying, because if anybody can get access to the Internet through an Internet service provider, which functions as a common carrier, and set up their own web site, then there's no problem.

Marty Abrams:(42) I'm interested in what the communications revolution is going to mean in terms of commercial information provided to other commercial organizations for commercial purposes. In the current technology or the technology from two years ago, at TRW, where I direct privacy, things are fairly easy. Dedicated communications lines and dedicated formats provide a lot of data in tapes where we control the programming of what was on those tapes. But, the communications changes are going to make the concept of interactive commercial access to commercial databases real. I still have the responsibility for compliance with Fair Credit Reporting Act.(43) I've still got responsibility for compliance with our fair information values. How is the public going to see this interactivity of a Citicorp with a TRW or anybody else with a TRW in the future?

Mr. Nugent: I thought that it was a good question to ask, because there was a lot of emphasis on the bulletin boards and the communication of individuals. There is very little emphasis these days on commercial transactions—how people are going to get paid on the Internet. How is information going to be exchanged? Who owns that information?

But, it's not just the Internet. It's not just the on-line interactivity. It's going to be card-based devices where whole transactions will occur electronically between a card and a machine. And that machine may be a waiter's PDA. It may be an ATM. It may be a screen phone. With all due respect to the Internet, that's where it's happening these days. There are huge amounts of development work going on and very little focus on the security, privacy, and ownership issues there. What is the government going to do in that area? Will there be an impact of the—what I call the Internet debate—on commercial discourse and transactional exchanges?

There's really, right now, a real disconnection between the two, where most of the policy issues, most of the conferences, and most of the publications, etc., are focused on human beings communicating with each other over the Internet. And there is more and more business being done on the Internet—more and more individuals doing business, getting empowered, doing business. And there's just nothing out there on this. And it is troublesome, because what will happen is that most of this will be worked out between big corporations, consumers, and small businesses by way of contracts that will impose conditions potentially on consumers or small businesses.

Hopefully, that won't be the case. I think most smart businesses will understand that this has got to be a bilateral discussion, and there's got to be fair dealing and fair information collecting and the like. It's going to be an interesting debate. But most of the debate right now is focused on the Internet. And it's a small, small part.

Ms. Branscomb: I'll be glad to tackle the non-Internet environment, since both TRW and Citibank know an awful lot about me. I do have, what I would like to think, is a trusting relationship with Citibank, because I did apply for my Citibank Visa card. I don't have any relationship with TRW that I'm aware of, except that somehow they send me a report every six months telling me nobody has inquired about my credit. But I would like to have a trusting relationship. And I think that's the direction in which we, as individuals, are going. We want more choice and control over what people do with information about ourselves.

I am making an effort with the mail, but what can one person do? I first tried to send out a notice asking the direct mail preference service not to send any mail to any of the addresses that were misspelled for the Branscombs some years ago. And within six months, everybody who had a misspelling of our name had it right, and our mail tripled.

This summer we had a new house, and we didn't want anybody to send any mail to the post-office box. Of course, Publisher's Clearinghouse got it from the mail service. And whoever they're selling our names to are also sending mail there. But, I got the address of the Direct Preference Service from the post office and said, "I want to get rid of all of this junk mail in my post office box." We sent it off. And it got returned,

"addressee unknown." So that didn't work either.

What I am now doing is every time I purchase something I send a note saying, "You have no authority to sell my

name or address to any other party." And in fact, my husband looked at the mail the other day and said, "You know, the mail that's coming in is beginning to look more like something we like to see."

So I think there is that opportunity for voluntary trusted relationships with commercial providers in which, when you deal with them, they assure you that they will use the information about you only for the purposes which you authorize and which happen to be helpful to you. One of the problems with the computerized environment, however, is that there is both a good side and a bad side. It's very hard to draw the line between the things that are unhelpful to us. If the stream of information that comes back to you looks more and more like something that you really wanted to see, then it's beneficial to you; whereas it may just be an overload or it may, in fact, be detrimental to you if it's information about what drugs you're taking for AIDS and the information that you have AIDS gets widely distributed. So it's choice and control, I think, that the individuals want at this point.

Ms. Kirsh: We had to confront this issue at AOL because we have engaged in the practice of renting our mailing lists, which did get some national attention last year. And what we have done is put an area on-line where people can go and say, "We don't want our name on the mailing lists that you sell." A lot of people go into that area. But the interesting thing is that more than 80 percent of them, instead of taking their name off of the mailing list, they ask for more things. They say, "Sure. Put me on the travel list. Put me on the entertainment list."

And I think it's interesting, because I think that if people are given the choice, there is some information that they'd like to get. If you don't want Publisher's Clearinghouse, maybe there are things that you would like people to send to you, if there is some reasonable way to do that, that could turn out to be a good thing for everyone.

And another related point is that I did have the shock of my life in terms of how much information is collected without anyone really having any idea that this is going on. At least I didn't know this was going on. I was at a conference for in-house corporate counsel. And Prentice-Hall Information Services was there in the hallway demonstrating their wares.

And the guy from Prentice-Hall said, "Let me show you our new software program that we have. Let me show this new database we have. What's your name, and what state do you live in?"

So he puts in my name. And he puts in that I live in the state of Maryland. And it pulls up three people named Ellen Kirsh, which I thought was fairly interesting. And we ascertained which one was me. And then he pulled up my mortgage, my mortgage records, something called my wealth rating, and, I think, my credit rating. He had my husband listed as a tenant in my house. He had a whole page of stuff in the hallway at this conference. I said, "Would you get that off of the computer, please, you know, turn that off?"

I think that's what's going on here. But I do think that there needs to be some kind of consent that you can before people can start to compile this kind of information. And I understand why I get all of these calls at dinner.

Mr. Cate: Let me ask two questions. First, what is it in this area that you would like to see? And what is the relationship of trust? Is it the opt-out? Is it that you get, at least, advance notice? What is it?

And second, what happens when you don't find that? Should there be a legal remedy? Just like there are, in fact, laws and regulations applying to the post office, should there be laws and regulations relating to your name, address, and identity applying across the board?

Mr. Nugent: There is a Telephone Consumer Protection Act,<sup>(44)</sup> of course, which governs the use of auto dialers, voice messages, and cold marketing, and enables individuals to get on the "Do not call" list. If you call someone twice after they say, "Take me off of the list," there are fines. And then there is state attorney general action.

But the smart companies really should understand that in this age of intrusive practices, the use of data for purposes other than why it's collected is like a Three Mile Island equivalent for one to abuse data. The nuclear industry was, in fact, crippled for a period of time because of practices of one participant in the industry. I think most companies are starting to come to that point of understanding. They've got to disclose what they are going to use data for. It should be between the customer and the company. I believe and, I guess, Citicorp believes that the terms and conditions of the

use of the data should be negotiated.

One of the blessings of technology is that so much is happening so quickly that a lot of things can be offered to the consumer through the use of computers' transmission technologies. And it can be done very quickly.

There is a cost to be paid for limitations on what that technology can do. In other words, if a consumer says, "Take me out of the list for purposes A through C, but I want D through F and G through H," well, that slows things down. It's going to make things more expensive. That can be done. It's not a problem. But the smart company, bottom line, should work it out with their customers. And there should be full disclosure, either in the applications or in on-line requests for information, which authorizes the use of that information for certain purposes.

Ms. Kirsh: There is a tremendous benefit to consumers if there is a way to get advertising-type content directed to consumers who are using these on-line services. That's a mechanism whereby the cost for these services could be dramatically reduced. So that gets to, maybe, even to the equal access and free access kinds of questions.

The whole industry is just now experimenting with high quality content-oriented advertising which, instead of being bombarded at a consumer, a consumer might choose to use. For instance, there might be an area on-line about cars. There could be articles from magazines about cars. There could be advertising from the various car manufacturers. There could be related information. Consumers could choose to read the advertising and thereby trigger some payment by the advertiser to the on-line service provider for instance. And that could subsidize or greatly reduce the costs. And so there's good news here. I agree with that. It's just that it has to be done right. It has to be done in a way that's not offensive.

Ms. Branscomb: The Federal Trade Commission has just put out a set of proposed rules for abuses of telemarketing, which also includes any telephonic connection by a modem. It's fairly extensive.

Last summer, Congress passed an act<sup>(45)</sup> requiring states to make it possible to avoid having your name and address given out when they sell the motor vehicle records. That's one major source of names and addresses. However, I am told by David Flaherty, who is the Privacy Commissioner up in Vancouver, that there are fourteen exceptions. Almost anybody, who has any reason whatsoever can get access to these records, can come under one or another of those exceptions. But at least it's a step in the right direction.

Most of the direct mailers don't want an opt-in system because it's more complicated. There are lots of people that don't care, for example, how much mail they get. Direct mailers want to permit you to opt out. But they make it very difficult for you to opt out. You've got to send a separate letter. And it's always in fine print. And lots of companies don't honor it. So it's not easy yet. But I think it will become more so as people insist upon having more control over what they get.

But back to Ellen's point about the convenience. CompuServe does have the specifics on all automobiles that are available. Three years ago, I went in and got all of the comparisons of all of the four-wheel-drive vehicles. So, it is a great convenience when you want it. But you don't really need it in the newspaper every day because you're not buying the car every day. So there are tremendous savings to be made by offering this kind of advertising on-line.

James Miller:<sup>(46)</sup> I've been struck by the number of times when analysts have alluded to the need for governmental authority to assert itself through task force studies, which then recommend legislation, which is acted on by the Congress, and which requires the intervention of courts to interpret. (There was reference earlier to the United Nations, which is a supernational political body, and I believe there's an EC representative among us.) And there have been comments that, perhaps, if the government doesn't intervene, whatever the government might be, then corporations acting out of necessity will strike their own deals, which will become a kind of private government. It's not the first time that's happened.

I'm perplexed. I think we've been living in an era maybe twenty, even twenty-five years now, of rather intense deregulation. It seems now to be in its rabid stage. There is an intense ideology in the West, certainly, one has seized this town, which argues against the very legitimacy of the authority that you're calling on, as experts, to intervene. I wish you would explain the likelihood of government intervening and its desirability, particularly from a corporate

perspective.

Mr. Nugent: I think Citicorp is seeing more government activity in this area and more rules and regulations. The Telephone Consumer Protection Act(47) is a good example of something that comes from a whole different area and affects us. The FCC proceeding is another. As more companies use more technologies, the impact of a particular technology regulator is going to have a more pervasive effect. When the FCC issues a ruling, it doesn't affect just a small range of companies. No, now, it affects all users of the technology. Government is getting more pervasive, because technology, for some reason, is being regulated for one reason or another.

I was surprised to hear a call for the United Nations getting involved. I think that came from the frustration of so many rules being issued that affect so many players. There needs to be some order in this system, because businesses, from the commercial point of view, need to make plans. They need to figure out what the investment should be and the capital to be applied to a particular area. Contracts have to be written.

If you look at the information industry, or the Internet, or the electronic commerce area where, in ten years, we'll all be doing business, it's a mess. There are roles for government in certain areas. For example, the government needs to deal with other governments on the issue of transborder data-flow and privacy. I don't think, however, that the government should get involved in what are, essentially, bilateral, contractual relationships between vendors and consumers and between providers and users of electronic commerce.

There's a real role for intelligent, smart companies and intelligent, smart consumers to work things out. If there are abuses, as there will be, then we're all going to pay. It's up to the self-policing and the self-education of everyone that is on-line and up to speed.

Ms. Branscomb: If everybody behaved in a perfectly rational manner and we all had perfect information, there would be no need for government. There is a theory that all of us will be sitting at our computers, and we'll have access to the world's information, and we will make our own choices. And somehow, through this chaos theory, since we're all rational human beings, we will reach consensus and there will be no need for government. But everybody doesn't have a computer. We aren't all rational. Corporations don't necessarily behave in a benign and generous way. So we do have regulations to try to regulate what we consider appropriate behavior.

I don't want to address that aspect of it. Although in the area of regulating content and carriage, the European Community is so far ahead of us. They have such a large economic market that they're setting the standards for the world, for the global market at this point. So if we don't do something in that area, we will be left behind or following their lead, because we don't have too much choice.

But I think I'd really like to look more at the questions of content, and "What is the government's role with respect to content?" because if you look at the economics of information, there are really three different ways we fund it. We fund that which we, as consumers, want to purchase through our purchases. And that's where deregulation is trying to make available as much as possible in the marketplace. There are some things we fund through voluntary contributions. And there are many foundations and operations that work through those voluntary contributions. And the third area is through aggregation of resources through government for the production of content that the voluntary organizations and the corporations are not willing to invest in. So there are certain areas in which we rely upon the government to do that which we cannot do individually. So there's a perfectly legitimate role for government.

Ms. Kirsh: Right. Well, there are some things that are just broken in our legal system now that need to get fixed. I'm not a big fan of government regulation. And, certainly as a profit-making enterprise, I know that will only cost my company money. So I don't invite it freely. But the perfect example is the music copyright area. There is enormous confusion there. No one understands whose rights are being exercised when music is uploaded and then downloaded on a service. That has to get fixed for us to really be able to offer that—offer music on our service without facing unknown, unlimited liability. So there are some places where the government really has to act because, they're the only ones with the power to fix it.

I also think that in a global situation—that is really what we're in—there really does need to be some kind of intelligent, coherent plan of action that companies can operate within to do business worldwide. I'm thinking of things

like encryption standards, for instance, where, unless we have some kind of cooperation from our government with regard to that we're going to have problems competing globally. So there are places where it's only the government that can do it. And they really ought to step up and do it in a fair and intelligent way. And there are many, many other places where they don't belong at all and where I hope that they don't go. And that's really what it is. You can't say it should be regulated or deregulated. We've got to be reasonable about how we approach this.

Mr. Cate: We are very pleased to have with us today the principal administrator and secretary of the EU Legal Advisory Board, Mr. George Papapavlou.

George Papapavlou:(48) Thank you very much. I work for the European Commission. I am the head of the sector that is called Legal Aspects of the Information Market, based in Luxembourg.

I have not been surprised to see to what extent all of these issues and problems that have been discussed in this room today have been identical to the ones we have been dealing with in the European Commission and in Europe. I share what has been said by the panel that deregulation, in fact, is the idea that the market is opened up, that competition is encouraged, and that the public sector does as little of business as possible and leaves as much as possible to the private sector. At least this is the way we understand it in Europe.

It really means, however, that to do that, this has to be done in a certain way, under certain rules. And these rules have to be set by the state, by the public sector. The reason for this—and this is a word that I have not heard in this room today, although it has been implied in most people's contributions—is that behind every rule there is the same word, and this is the word "balance."

Intellectual property law is a balance of, at least, twenty different interests. And what balance is struck in each country depends on the balance of power in the given society, in the given country. The author, the publisher, the user, the competitor, the public interest, all of these are different interests which have to be brought together.

Ron Plesser already mentioned the conflict between privacy and a sense of anonymity, and security or intellectual property in the sense of accountability. This is another kind of conflict. But inside privacy, there is a conflict also of he who wants his data to be confidential and he who wants to use the data for different legitimate purposes, so that there are many conflicts that have to be solved by finding balances. This is an exercise that cannot be done by market forces alone or by the private sector. This has to be done by the public sector.

So, of course, the main weakness of this means that the legislative process of the public sector takes very long. It has already been mentioned in this room. In my experience, it's even worse, because, of course, legal instruments that are proposed by the European Commission may take anything between three and thirty years to become law. I say thirty because, six years ago I was helping the Greek government with the presidency of the European Union. And I was put as chairman of a number of groups that dealt with legislation that had to be adopted by the Council. So I was playing the council role, not the commission role for six months. Among the issues that I had to deal with was the concept of "European" companies, under which it will be possible for some companies to move from one country to another under a reasonably common set of rules, including the participation of workers in the management of the company. The first "European" company proposal was made in the 1970s. It's still on the table. The legislative process can take very long.

I read with dismay, flying to Washington, that the famous biotechnology directive was being rejected by the European Parliament, although it had been discussed for six years, and although it seemed that in the end a compromise had been found, it was a watered-down version of the original proposal, not satisfactory for anybody. But it seemed to be a compromise that could be accepted. In the end, it seemed that specific lobbies managed to convince some of the Parliament members. And so, in the end, although this was an important proposal, it was turned down.(49)

You know that the privacy directive had taken five years until the twentieth of February when the common position was reached. In other words, now we have a text which we have sent to Parliament for its second reading. The procedure that remains to be accomplished will probably take another year. So in another year, we will know whether we will have this directive adopted, or whether we will have it turned down as happened with the biotechnology directive. We hope that it can be adopted in about a year.

The last example is also the first of my questions. It concerns intellectual property rights. As many of you may know, one of the proposals that is currently being discussed by the Council—the body that legislates in the European Union—is a proposal for the legal protection of databases. In Europe, to protect a work by copyright or author's right, in the French version of *droit d'auteur*, what we really need to see is the degree of originality of the work. And this degree of originality relates to the form and the expression and not to the content or the idea. So we have thought that, for some of the digital works, the products that will be on the superhighways, this criteria will probably mean that they will not be protected by copyrights, because they will not be considered to be very original, although, in terms of content, effort, and investment, they may have been the result of considerable investment and effort. So in the proposal, there is an element, a new idea introduced, which is the right against unfair extraction of content. The main difference is that this is protected for fifteen years, whereas normal copyright now in the European Union is seventy years.

My first question is: Would, in your experience or in your belief, copyrights, as understood in the United States, cover all of the digital, all of the information products that should be protected? I'm particularly referring to the *Feist* case,<sup>(50)</sup> which created some problem some years ago. The second question is: To what extent has discussion on privacy progressed? I know that there has been, in different forums, discussion about the possibility of a privacy committee. But I don't know if there has been anything out of it yet or not.

And the last issue concerns convergence and competition. In Europe, in some Member States, those who have a reasonable degree of advanced technologies—for example, France—there are different regulatory frameworks for the different media. Different media being the press, audiovisual, and what's called the telematic, which is probably the information technology on-line, transmitted on-line, the broad difference being that the press is very free. There is very little restriction on the content. Audiovisual is very much regulated in terms of content—who gets the license—but also what is on the program for different reasons, and the telematics part being somewhere in the middle.

With the convergence of technologies and multimedia products, and all of the rest of it, we are in a situation where distinction would be increasingly difficult to make between these three traditional types of works or services. There has not yet been in Europe any conclusions drawn from this. Are we going to a new kind of regulation? Are we going to call everything multimedia, everything audiovisual? In the United States, are there regulatory distinctions to start with?

Mr. Cate: All right, we have three questions on the table: one on copyright law, one on privacy law, and one on the convergence of the regulatory structures.

Ms. Kirsh: Regarding the copyright law question, the basic rule here is the fact that the content is digitized really has no effect at all on its copyright status. If you take content that is otherwise subject to copyright, and you put it into the information highway, it is still protected by the copyright law.

Mr. Papapavlou: But what if it's not subject to copyright?

Ms. Kirsh: If it's not subject to copyright, I know of no case, rule, or interpretation which would say that somehow a copyright is independently created because it's put onto an on-line service. There doesn't seem to be any increase in the copyright right because of its form on the service. To the extent that *Feist* says that telephone directories are not copyrightable, then they wouldn't be, if you put lists of names and phone numbers on an on-line service.

The question though is does this medium really allow for a lot more flexibility in terms of how you organize things that might not be copyrightable. We may be able to have things now subject to copyright that would be harder to do in a print mode. We can put graphics on there. And we can do a lot of flashy, fancy stuff in this kind of medium, which might begin to expand the ability to claim a copyright in some content which otherwise we wouldn't have.

Mr. Kahin: Well, let me make a general observation that may be responsive. The technological richness of this environment creates a lot of opportunities for business models that don't rely as heavily on intellectual property protection as you might think. There is a lot of concern that you see in the green paper of, "Oh, my God! What are we going to do to provide stronger protection for intellectual property so people will put stuff on the highway?" But you see a lot of stuff being just thrown out there as it is, without any change in the law. It is either complementary, it

serves as advertising, or on some kind of a subscription basis. There are really a lot of possibilities here beyond this vision of usage being tightly controlled, monitored, and metered, and every incidental copying into computer memory being subject to copyright.

Mr. Nugent: What may be said is that copyright protection of electronic databases may not be the best way to protect that database. One might look at getting a patent for that. There are patents obtainable in the U.S. for data structures. It's got to be new and nonobvious. But if it is done in a certain way, one can get a patent on data structures that are implemented in the computer systems. So the copyright expression or the copyright may not be as useful in the electronic debate.

Ms. Kirsh: I think we are way behind the Europeans in terms of protection of privacy. We really don't have an organized privacy scheme here. We have some proposals which are likely to be made in Congress this year that are going to address that.<sup>(51)</sup> But, I don't think we're there yet. I mean, all of us on this panel are very interested in figuring out how to intelligently protect privacy of people who are using this information infrastructure and do it in a way that makes sense both commercially and also for the academics and everybody who's involved in it. But there's not anything that I'm aware of that has addressed that yet here.

Ms. Branscomb: I think the Europeans have a much better framework for dealing with these issues, because they have the Commission, which is examining them in some kind of coherent manner. And although it's a slow process and countries may not respond by passing the law as the Commission recommends, it still is a reasonably rational process. The only thing we have that's even comparable is the Office of Technology Assessment<sup>(52)</sup> trying to do a study every few years when Congress says, "We really don't understand this issue. Will you go out and conduct a study?"

As far as a convergence of the regulatory framework, I did suggest to Congress in 1989 that it would make a lot better sense if we had the copyright, patents, and trade secrets all under the same administrative office where you didn't have to master all of these different legal areas in order to assist people who are worried about intellectual property.

As far as *Feist* is concerned, I think it really does create serious problems for databases in this country. I actually think the *Feist* case was wrongly decided on the facts, because a telephone number is a very complex way of accessing telephone lines. It's not really a fact as I would perceive it. But, the lawyers didn't argue that. They conceded that they were facts. But, it does leave very little that's protectable for a database.

Just in terms of fairness and equity, to say that someone can go in and take all of the real value of the content—I mean collecting it and organizing how you massage it and so forth—really is the valuable part of it. And the copyright law is very thin protection, although they are being very lenient in terms of what they are permitting to be copyrighted. But that it is a serious area and an impediment.

The real problem is in terms of deciding how much or how little of something you can take. And our cases go from something very small of a sound byte being protectable to something very large, like the parody for commercial purposes. And we used to say that if it was for commercial purposes, it wasn't fair use. But, our case law goes from a tiny little piece to the whole thing, and we don't really know what is in between. When you are looking at multimedia and graphics particularly, you can take an image and "morph it" and change it into something else. And I'm not sure you even track what piece has been taken.

So I think that's a very complicated area that we really don't have a handle on yet. And I don't know that we have a venue in which we're even discussing multimedia and how you handle these problems of graphics. I think we do have some serious problems that we have to address.

Mr. Nugent: One cannot let the privacy answer go by without the usual position that the U.S. has a different approach to privacy. And you know, we have it sector-specific rather than omnibus. And I think one thing we have found is that through common law, through contracts, through sector-specific legislative and regulatory codes, that the U.S. has, certainly, an inadequate privacy scheme when it comes to dealing with the European Community.

And it seems to me that one area where we do fall down in terms of the regulatory approach is that the U.S. constantly gets outgunned in these international forums because it has no specialist. It has no privacy advocate that articulates this

when dealing with other governments. And also, U.S. businesses doing business abroad have no resource to rely on. And it may be, one thing we've said, that the state of protection board may have some utility in the international context where the U.S. would be represented. And there would be some adequate representation at the international level.

And as far as the multimedia aspect goes, we have found that this is one area where you've got to deal with the rights to use the picture. You've got to get the rights to use the music. You've got to get the rights to use the text. And what you have to do is just apply all of this in a very complicated fashion.

I don't know if we'll ever have one multimedia law that is omnibus in its approach. We will probably continue to deal with making sure, as Disney had to do when it replayed the voices of the singers, that it had the authority to have those voices in the VCR version of the original film. They didn't in some cases. And they lost.(53)

Ms. Branscomb: If you want to take a look at how difficult it is to get all of the clearances, take a look at the CD *Cinemia* that Microsoft has put out. In the 1992 version there are no motion picture clips because they couldn't get those rights. But, I think, they are in the later versions.

Max Paglin:(54) I hope this question is not regarded as the skunk at the garden party. But I would like to pass from the specific couple of hours to a more general question. And it comes from Anne's depiction of someone sitting in the room at this computer screen. And it involves everything else that everybody has been saying throughout the world.

I am reminded of this wonderful cartoon in the *New Yorker* about two or three years ago. At a power lunch, there's this investment advisor and his client who has this horrified look on his face. The investment advisor has his hand on the client's arm. And he says, "Herbert, trust me. The communications superhighway, fiber optics, satellites will never replace the schmooze." Which means, what is going to happen to the historical interpersonal communication skill? Teleconferencing, in my view, will never, never replace eye contact across a table. But, will there still be room for eye contact and interpersonal human intercourse, or will we all go into the Orwellian, sitting in our little room punching the keyboard?

Ms. Branscomb: I don't think that the airlines are losing money because, as you meet people across the globe, you eventually want to see them. And I think it creates as much interaction face to face as it does over the electronic communications.

Mr. Kahin: We really don't know what it's going to be like to interact with people visually. But, I think it's very interesting to see that in Japan this whole phenomenon is looked at much more as "multimedia society." To them, it's the opportunity to be able to interact with the full visual representation of people. A large part derives from the limitations of their alphabet, because the kind of communication that has developed here on the Internet and on-line services, hasn't developed over there. So they believe very much in that kind of interpersonal, in person experience that you were describing and believe that it needs that full bandwidth of motion video to take place.

Ms. Kirsh: I think this will just make us more efficient and give us more time really to do the other things. And I struggle to have time to meet people that I'd like to meet and go places I'd like to go. If I could get information and the communication more efficiently done, it would give me more time for that. And I really think this is going to just make it easier for us to do more. And maybe that's not so good. I don't know about that.

Mr. Kahin: The problem is it's a competitive environment. And everybody else is going to be doing more, too.

Mr. Cate: And, Max, as long as it provokes issues like this, we're always going to have conferences to worry about those issues. I want to end on time. But I want to give the panelists one last chance to get in anything remaining that they would like to say.

Ms. Branscomb: Well, I was just going to respond to Max that there are communications studies that show that what people want to do, rather than going out to the large presentations and the stage and music and so forth, because they get that on television, that what they're really seeking is small encounters in going out to dinner with people or small groups. I think human interaction is so important to us as human beings that we aren't going to get away from it.

It does put a lot of stress on those of us who are dealing with too many environments and too many correspondents. And I keep my e-mail address fairly close at hand because I'm not sure I can cope with too many more people. But, I think it's important to realize that even though we have a great deal more accessibility to human knowledge and to people all over the world, time is still constant. And there is a limited amount of time. And that is still scarce. So we still have to deal with that kind of scarcity.

Mr. Kahin: Well, I want to say a few things about complexity, because I think it's the recurrent theme here. It came up in the earlier part of this session about the problems with the legislative process, the problems of dealing with the legal process. You can marshal a lot of complex information in the legal process, but it's extremely expensive. It is skewed by the fact that it is an adversarial proceeding. It is in many respects, even worse than the legislative process, such as this long-term gridlock over telecommunications policy reform which, after years and years, seems to be almost coming to a breakthrough.

Picking up on the multimedia issue, this is the real problem of managing legal rights in a very complex, function-rich environment where all of these different practices and legal considerations, like the access to sound recordings over the on-line services, are all coming together. It's one thing to deal with them on a CD-ROM, where there is a self-contained frame of reference. But you put all of those same questions out in the on-line environment where you have no idea of how people are going to use the material, and it becomes a virtually unmanageable problem. So actually, what happened in the multimedia industry initially was a lot of flirtation with "How can we set up some kind of database in the sky that can handle this rights issue?" But now, there's been a real move back to creating original material, because the transaction costs of dealing with existing material are simply too high.

Ms. Kirsh: I guess I'd like to end by just making a plea that, however this all sorts out, that we keep in mind that it's still important to be able to deliver this wonderful media to real people, that we have to leave this cheap, affordable, easy, and usable. And we have to make this work for everybody.

And when I see rooms full of lawyers, and I'm certainly one, starting to think about this, you do start to realize that it can get very complicated. It can get very expensive. It can really get out of control, and that we all really have to work hard to not let that happen, and to let this grow and develop in a way that really makes sense for real people out there.

And I guess the other thing I have to say is: Having grown up in the software business for many years, it has really been, personally, very exciting for me to be here in the communications world. I really feel like it's converging right here, today. And I appreciate the opportunity to be here and to learn from all of you.

Mr. Nugent: I think one thing I've always struggled with is: "Is there such a thing as information law, information policy? Can one say, legitimately, that one earns one's living as an information specialist?" And I guess the answer to my question is: "Yes, there is." To get things done these days, in the electronic world that we're in, one has to call on a range of disciplines and skills, technology-wise, legal-wise, policy-wise, which are becoming fairly contained in the sense of there's a parameter one can draw around the set of skills and specialties one has to bring to a table for any company, for any client, for any government having to try to do business. And I think there is. We all share a set of skills and disciplines which, I think, we can call information policy and information law. And it is a multidimensional, multitechnological solution.

Mr. Cate: Thank you.

(1)Glass-Steagall Act, ch. 89, 48 Stat. 162 (1933) (current version at 12 U.S.C.

§ 378).

(2)Cubby v. CompuServe, 776 F.Supp. 135 (S.D.N.Y. 1991); Playboy Enterprises,

Inc. v. Frena, 839 F. Supp. 1552 (M.D. Fla. 1993).

(3)See S. 314, 104th Cong., 1st Sess. (1995).

(4)Playboy Enterprises, Inc. v. Frena, 839 F. Supp. at 1552.

(5)Cubby, Inc. v. CompuServe, Inc., 776 F. Supp. 135 (S.D.N.Y. 1991).

(6)Ithiel de Sola Pool, Technologies of Freedom (1983).

(7)John Perry Barlow, former Grateful Dead lyricist, is founder and chairman of the Electronic Frontier Foundation.

(8)Lance Rose, *The return of the Ludditar*, WIRED. *Wired* is located on the Internet at [www.hotwired.com](http://www.hotwired.com).

(9)General Counsel, Prodigy.

(10)National Commission on the New Technological Uses of Copyrighted

Works, Final Report of the National Commission on the New Technological Uses of Copyrighted Works 13 (1978) (includes dissent by Commissioner Hersey).

## **(11)Id.**

(12)See Anne Wells Branscomb, *Internet Babylon? Does the Carnegie Mellon Study of Pornography on the Information Superhighway Reveal a Threat to the Stability of Society?*, 83 Geo. L.J. 1935 (1995).

(13)Marty Rimm, *Marketing Pornography on the Information Superhighway: A Survey of 917,410 Images, Descriptions, Short Stories, and Animations Downloaded 8.5 Million Times by Consumers in Over 2000 Cities in Forty Countries, Residences and Territories*, 83 Geo. L.J. 1849 (1995).

(14)394 U.S. 557 (1969).

(15)U.S. v. Robert Thomas et al., No. CR-94 20019-G (Tenn. 1994).

(16)Rimm, *supra* note 13.

(17)Jacobellis v. Ohio, 378 U.S. 184, 197 (1964) (Stewart, J., concurring).

(18)See Jared Sandberg, *Company Providing Access Threatens To Restrict Firm in*

*'Lease and Desist' Order*, Wall St. J., June 22, 1994, at B5. See also Jared Sanberg, *New Effort to Push Envelope Spooks Many Who Fear Junk Mail in Cyberspace*, Wall St. J., May 9, 1994, at B2.

(19)See Katherine Campbell & Louise Kehoe, *Bertelsmann Joins Up for European*

*Online Venture*, Fin. Times (London), Mar. 2, 1995, at 19; Jeffrey A. Sandberg & Jeffrey A. Trachtenberg, *America Online Shares Surge to Record As Bertelsmann Confirms Plan for Stake*, Wall St. J., Mar. 2, 1995, at B6.

(20)Peter H. Lewis, *Student Accused of Running Network for Pirated Software*, N.Y.

Times, Apr. 9, 1994, at A1. See also Peter H. Lewis, *Computer Use Indictment is Thrown Out: Federal Judge Clears Student at M.I.T.*, N.Y. Times, Dec. 30, 1994, at A17.

- (21) Information Infrastructure Task Force, Intellectual Property and the National Infrastructure: The Draft Report of the Working Group on Intellectual Property Rights (1995).
- (22) *Comprehensive Technologies Int'l, Inc. v. Software Artisans, Inc.*, 3 F.3d 730, 28 U.S.P.Q. 2d 1031 (4th Cir. 1993); *Goldwasser v. Smith Corona Corp.*, 817 F. Supp. 263 (D. Conn. 1993); *In re Alappat*, 33 F.3d 1526, 31 U.S.P.Q. 2d 1545 (Fed. Cir. 1994); *Computrol, Inc. v. Lowrance Electronics, Inc.*, No. CIV. 93-0439-S-HLR, 1994 WL 828489 (D. Idaho Nov. 10, 1994); *In re Trovato*, 60 F.3d 807, 35 U.S.P.Q. 2d 1570 (Fed. Cir. 1995).
- (23) See generally Howard T. Markey, *The Court of Appeals for the Federal Circuit: Challenge and Opportunity*, 34 Am. U. L. Rev. 595 (1985).
- (24) Max Frankel, *Cyberights*, N.Y. Times Mag., Feb. 12, 1995, at 26.
- (25) Anne Wells Branscomb, *Who Owns Information: From Privacy to Public Access* (1994).
- (26) Paul Goldstein, *Copyright's Highway* (1994).
- (27) *Williams & Wilkins Co. v. U.S.*, 172 U.S.P.Q. 670 (Ct. Cl. 1972), *appeal dismissed*, 487 F.2d 1345 (1973), *cert. granted*, 417 U.S. 907 (1974), *aff'd*, 420 U.S. 376 (1975).
- (28) Partner, Piper & Marbury, Washington D.C.
- (29) See Cable Communications Policy Act of 1984, Pub. L. 98-549, 98 Stat. 2779 (codified as amended in scattered sections including 47 U.S.C.).
- (30) Communications Act of 1934, ch. 652, § 602(a), 48 Stat. 1064 (codified as amended in scattered sections of 47 U.S.C. (1988 & Supp. IV 1992)).
- (31) *Playboy v. Frena*, 839 F. Supp. 1552 (M.D. Fla. 1993).
- (32) *Cubby, Inc. v. CompuServe, Inc.*, 776 F. Supp. 135 (S.D.N.Y. 1991).
- (33) See generally David R. Johnson & Kevin A. Marks, *Mapping Electronic Data Communications Onto Existing Legal Metaphors: Should We Let Our Conscience (And Our Contracts) Be Our Guide?*, 38 Vill. L. Rev. 487 (1993). In this article, Johnson sets out the notion of regulating cyberspace but does not use the phrase "international maritime law for cyberspace." However, Johnson does make a compelling argument for the creation of a regulatory scheme akin to that used to control the trucking industry.
- (34) Senior Vice-President for Public Policy and Counsel, Newspaper Association of America.
- (35) Senior Associate, Maloney & Burch, Washington D.C.
- (36) Associate Professor, College of Communication, Penn State University—State

College.

(37)Of the estimated 260 million people who live in the United States, less than 10

percent (approximately 23 million) own home computers. In addition, the Internet is believed to be accessed by 20 million people nationwide. Statistical Abstract of the United States No. 1351 852 (1994); Robert L. Dunne, *Detering Unauthorized Access To Computers: Controlling Behavior In Cyberspace Through A Contract Law Paradigm*, 35 *Jurimetrics J.* 1, 4 (1994). See generally Philip Elmer-Dewitt, *First Nation in Cyberspace*, in *Big Dummy's Guide to the Internet* (1994).

(38)Section 312(a)(7) of the Communications Act of 1934 provides that the FCC may

revoke a license "for willful or repeated failure to allow reasonable access to or to permit purchase of reasonable amounts of time for the use of a broadcasting station by a legally qualified candidate for Federal elective office on behalf of his candidacy." 47 U.S.C. § 312(a)(7) (1988 & Supp. IV).

(39)Section 315 of the Communications Act states:

If any licensee shall permit any person who is a legally qualified candidate for any public office to use a broadcasting station, he shall afford equal opportunities to all other such candidates for that office in the use of such broadcasting station . . . .

47 U.S.C. § 315 (1988 & Supp. 1V).

(40)See *Red Lion Broadcasting Co. v. FCC*, 395 U.S. 367 (1969); *Miami Herald*

*Publishing Co. v. Tornillo*, 418 U.S. 241 (1974).

(41)James R. Beniger, *Cyberspace as Public Space: Toward the Commodification of*

*Collective Representation* (1995) (unpublished manuscript).

(42)Director, Privacy and Consumer Policy, TRW Information Systems and Services.

(43)Fair Credit Reporting Act, 15 U.S.C. § 1681 (1994).

(44)Telephone Consumer Protection Act of 1991, Pub. L. No. 102-243, 105 Stat. 2394

(1991) (codified at 47 U.S.C. § 227 (Supp. V 1993)).

(45)49 U.S.C.S. § 30117 (1995) (originally enacted as Act of July 5, 1994, Pub. L.

No. 103-272, § 1(c), 108 Stat. 745 (1994)).

(46)Professor of Communications, School of Communications and Cognitive Science,

Hampshire College.

(47)Telephone Consumer Protection Act of 1991, *supra* note 44.

(48)Principal Administrator and Secretary to the EU Legal Advisory Board.

(49)*European Parliament Rejects Biotechnology Directive*, 7 *J. Prop. Rts.* 34 (1995).

(50)*Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340 (1991).

(51)Proposed legislation included S. 982, 104th Cong., 1st Sess. (1995); H.R. 184,

104th Cong., 1st Sess. (1995); H.R. 1004, 104th Cong., 1st Sess. (1995); H.R. 1275, 104th Cong., 1st Sess. (1995); H.R. 1978, 104th Cong., 1st Sess. (1995); and H.R. 561, 104th Cong., 1st Sess. (1995).

(52)The Office of Technology Assessment ceased to exist on September 29, 1995. 141

Cong. Rec. E1886-01 (daily ed. Sept. 29, 1995).

(53)Sony v. Universal City Studios, Inc., 464 U.S. 417 (1994).

(54)Executive Director of the Golden Jubilee Commission.