Remarks of John Perry Barlow

I can't tell you the sense of strangeness that comes over someone who earns his living writing songs for the Grateful Dead addressing people who earn their living doing what many of you do. You live in a very different world, and I am pleased to say that it is getting mixed up. The reason that I am here has absolutely nothing to do with the Grateful Dead, it had to do with I met a fellow in 1989, Mitch Kapor, who I felt had been taken up in the same saucer I had been taken up in, who shared my sense that what computers were good for was not better adding machines, or a better computers had created a place, but that connected together, they created an environment, a place that human beings could inhabit.

It was encouraging to me to hear yesterday, that Dr. (Jay) Keyworth at the very least, and I think Robert Steele, had also been up in that same saucer. People who have that awareness are natives of the future. People who have a hard time with that awareness are always going to be immigrants. When we saw that computers had created a place, we started asking some questions about what kind of place it was. What were the operating terms and conditions of this place, what kinds of people already inhabited it, who was going to inhabit it, what was going on, did it have a name.

We decided in honor of Bill Gibson's futuristic description of a place rather like this, 200 years from now, in the novel Neuromancer, to call it "cyberspace". Cyberspace, if you're having trouble with the concept, is basically where you are when you are on the telephone. It's also where your money is, unless you have some Krugerands buried out in the garden...which I imagine some folks in this room might do. It's also, and I think this is very important, it's also just about where most of the world's business is taking place at the moment.

It's a very important place, and it's invisible to most of the people who are in it every day of their lives. I think it was Marshall McCluhan who said, we don't know who it was that discovered water, but we're pretty sure it wasn't a fish. In any case, when EFF first got together our principal concern was trying to make certain the Constitution applied to cyberspace. We could see the government, and specifically the Secret Service, taking actions which made it obvious that they didn't quite get it. It wasn't malicious, or any cause to be paranoid, it was just that they were differently clued. They didn't understand that the First Amendment applied equally well to bites as it did to any kind of I think at the time we thought that we were simply going to be able

to hire a few nasty civil liberties lawyers from New York, and that wouldbe that. But its a little like having a little thread on your sweater, and you begin to pull, and pretty soon you have more thread on the ground than on your back. It turns out that there are a lot of things going in this environment, that ask questions for which we don't have good answers.

It turns out that this is an environment in which the First Amendment, and just about every other law on the planet, is a local ordinance. It has no real jurisdiction, to which it can be applied within. This is a difficult concept to master, but it is something we are all going to have to grapple with, and I think that especially people in the intelligence community are going to have to grapple with it. Because you folks, and especially the CIA and NSA, have got some fairly stern guidelines about when you are doing domestic work and when you are doing foreign work. The one versus the other. Well, in cyberspace, the difference between domestic and foreign, in fact the difference between any country and any other country, the difference between us versus them, is extremely blurry. Extremely so.

This is also an economic environment in which every place seems to be everywhere at once. You have business going on in a way that makes it difficult to say, alright, this is our guy, this is General Motors, we're going to take care of his interest. It is not cleanly delineated. There are other things happening as a result of moving in to what is essentially an information map, and out of the world of experience.

And one of them that is especially pertinent to the people in this room, is that when you have direct email access to every member of your organization, it has a terrifically decentralizing effect on that organization. It tends to de-hierarchize--it destroys hierarchy. It flattens the organization. It creates a lot of confusion. It definitely has a seriously flattening effect on large organizations. There is a complete redefinition of ownership and property. I mean we now have as a principle item of commerce, where we can realize that old dream of getting something for nothing--the mind. You don' have to mine it out of the ground, you don't have to wait for the sun to grow some. It's just sitting around, you can get it just by sitting around and synthesizing some facts. So now we have an economy of virtual substance. Where as recently as World War II the economy was based on that which could be mined and that which could be grown from the ground. Everything else was simply passing it around. This is a fundamental change.

We also have some fundamental change on intellectual property. I think it is going to be relevant to you as you move to a more open interaction with the rest of the world. Copyright, as it turns out, bases most of its doctrine on the manifestation of intellectual property. Expression is regarded as that which

happens when you publish. Well, in cyberspace you don't have the bottles that you have been relying on for the protection of your intellectual goods are disappearing. And it turns out that what we have been doing is selling the bottles and not the wine. And now we have a lot of wine and nothing to put it in, and there are going to be some interesting problems that arise, and there already are.

In any case, when EFF saw the multitude of things going on in this arena, we battened ourselves down for the long haul, and are dealing with a whole range of issues, one of which Robert mentioned, the Open Platform initiative. Which is our effort to try to deploy something like universal data services.

We believe that the best thing that could happen for the American economy, and actually the best thing that can happen for liberty on the Planet Earth, is to have everyone capable of jacking in if they want to; by that we mean not only ISDN services at home, but also software that makes it less intimidating to use these tools. And we're working on both of those things, with the utilities commissions, the SCC, Congress, various Rbox and cable companies. And that is coming along fairly rapidly, and it is creating, along with the INTERNET, something like an international public network, not simply a national public network

I find that other countries are lagging in this. I just got back from other countries, and found the Japanese see absolutely no personal use for data... and they can't see any good reason to fire their 70,000 operators and go digital. We have a significant leg up on the Japanese that is not well known in this country.

Another thing that we are working on is the FBI's digital telephone proposal. I agree completely with Dr. Keyworth's comments; the idea that we should stop all telecommunications progress in this country in order to accommodate a minor agency is just amazing to me, and yet it has managed to live through several iterations with Congress. Also, as some of you folks here who work with the U.S. government know, we are involved with NSA and data encryption embargoes. It's our position that trying to embargo software is a little bit like trying to embargo wind. And this is a fact that many of you are going to have to come to grips with. Digitized information, when you don't have those cubbies and you don't have those bottles to stamp classified, and to encode, and to file.

This stuff is incredibly leaky, it's very volatile, it's almost a living form in the sense that it is self-propagating. If something hits the net, something which people on the net find interesting, it will spread so fast, it is almost like a virus of the mind. It's amazing. It think that you just have to accept the idea that we are moving into an environment where information --if it is interesting to people--is going to get out. And there

is very little that you can do about it. This is not necessarily
a bad thing, in my view. And this is a wild concept...

I'm going to talk a little bit about the nature of
information. This conference, I must say, has blown me away. I
had no idea there was a group of people in your (the intelligence)
community talking about these things. I am very pleased and
gratified with the folks I have met here and talked to personally.
I want to reiterate Dr. Keyworth's phrase yesterday, which is that
government, especially American government must replace its
obsession with limiting information dissemination... and the reason
for that--because we are engaged in--and I don't want to use the
word warfare--we are engaged in economic competition where our
principal adversaries is our ability to distribute information,
it is not our ability to conceal it, at all. I had a wild
experience a little bit like this last year, I was addressing the
computer security establishment of the Department of Energy the
people in charge of protecting the computers that bombs get created
on, the super computers that Dr. Keyworth had such a low opinion
of. The other keynote speaker at this was Edward Teller---huh--
well, if evil walks the planet its name is Edward Teller I can't
turn this down. So I got up and said that I wasn't necessarily
sure that secrecy was an asset. I wasn't going to say that it was
a liability, but you know, I knew how to make an atomic bomb.

You give me five and a half of weapons grade plutonium and a
week in my shop and I can come up with a bomb. It will be dirty--
but it will work. The problem for most people is they can't get
the industrial capacity ginned up to create enough of that
plutonium. I can't get my mass gas centrifuges to work. It takes
a whole society to put that together, even after the information is
available. It is not the information, which is readily available,
that is critical. It is the actual ability to execute that is the
critical factor.

I was interested to see what Dr. Teller was going to say to
that, and to my complete surprise and satisfaction he got up and
agreed with me completely, and went on to say that he had never
found that there was anything about our nuclear program that the
Russians could not get within a year, if they wanted it. Where
they couldn't compete with us was where we were wide open. He
cited the electronics industry, saying that when we ended World War
II, we were about 20 years ahead of the Russians in nuclear weapons
design, and about neck and neck in the electronic industry. We
went into a closed program on nuclear weapons design, as they did.
And we went into a wild free for all in electronics.

In the computer business, there are so many loose lips, you
actually have to really try not to learn what you competitor is up
to. These are just the meetingest bunch of people you ever saw,
and when they meet they can't help but tell one anther everything.

And look at the results. They speak for themselves. And as Dr. Teller pointed out, the Russians, by the time they quit being a threat, had moved to a position of slight parity in nuclear weapons, and they had dropped back in electronics to where they are 25 to 30 years behind us.

Now I think the intelligence community has a role to play. We are entering the information age. Information is what you guys do. I would hate to see you blow your lead. There are some serious things that have to be dealt with, that have almost nothing to do with whether it is open or closed. I mean the real problem with information is its usability--whether or not it is meaningful, whether or not it is genuinely useful. In the electronics industry, what you do is generate a lot of data. The signal to noise ratio on the net is terrible; there is an awful lot of racket. I mean you have the ultimate sort of secrecy, kind of like those fancy restaurants with the reflective walls, where you can hear the people shouting at you at your table, but you can't hear all the others in the restaurant; and that's kind of how it is.

What you folks have some kind of expertise at, is sorting out that which is relevant in the vast flow of data that is coming to everyone. That is an important role that is largely overlooked--so far the software solutions to this don't strike me as being very good. We talk about "agents" but they aren't smart, they are pretty dumb. They go out and find all sorts of things. The problem is that you have to pass data through a human mind, and have a human determine that it is meaningful. It is very difficult to get a machine to do that. There is also a question of authority and reliability.

I think that one of the things you are going to run into with open sources, as somebody mentioned yesterday, is that there are an awful lot of open sources that are intentionally slanted in a particular direction, to evoke a fearful response in the reader. I mean, fear sells, as you know. What you get in the press, it may not have the accuracy and authority that you really want.

I have a friend, I got a call from him, he is an expert on networking in the CIS. He said, I was just visited by the CIA, I don't know what to do. Well, they called me up and visited and wanted to know all about my report. So. Well, I'm afraid they're going to try to make me a CIA agent. CIA agent? You already are a CIA agent, they're just trying to figure out if you're a good one!

We will find that there are many CIA agents....the problem that I see the intelligence community having to grapple with, and Dr. Keyworth alluded to this, is the problem IBM faces as it tries to evolve. Information is incredibly time sensitive even if you do, which I think you absolutely must do, eliminate the unnecessary

classification within and without your organizations. You still have all the cumbersome buffers of bureaucracy. I mean, in a wilder moment this morning, I was thinking of coming in here with a proposal that you break up the CIA into about five different private companies and go into business. That's too good an idea to be ever implemented. But it is worthy of consideration. There is something that can happen when you have a profit motive, and you know that if you don't deliver, someone else will.

And with that note I would like to thank you very very much for your indulgence   I really have appreciated this opportunity to get to know you.

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