

Good Work Project Report Series, Number 14

Cyberlaw: Rethinking Order in Our New Reality

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The Good Work Project

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Since 1995, three teams of investigators, under the direction of Howard Gardner, of Harvard University, Mihaly Csikszentmihalyi of Claremont Graduate University, and William Damon of Stanford University, have been researching the ways in which leading professionals in a variety of domains carry out good work. "Good work" is used in a dual sense: 1) work that is deemed to be of high quality and 2) work that is socially responsible. Through intensive, face-to-face interviews, the researchers have investigated several domains, including journalism, genetics, business, jazz music, theater, philanthropy, and higher education. Pilot studies have been conducted of medicine and the rapidly emerging domain of "cyberlaw", with plans to explore these areas more fully in the future.

In addition to this central line of study, several other related lines of investigation have been launched:

1. The Origins of Good Work project is an examination of teenagers who excel in extracurricular activities.
2. The Dedicated Young Professionals Study focuses on those who have just begun (or will soon begin) promising professional careers.
3. Good Work in Interdisciplinary Contexts. Pilot studies of new arts/science media and of the Massachusetts Institute of Technology's Media Lab have been completed. Plans are underway to study interdisciplinary work at the pre-collegiate, college, and research institution level.
4. The Role of Contemplative Practices investigates the ways in which contemplation/meditation influence how professionals carry out work.
5. Encouraging Good Work in Journalism. This project, carried out in conjunction with the Committee of Concerned Journalists, is currently developing a "traveling curriculum" for use in newsrooms around the country.
6. Good Work as Transmitted through Lineages examines how the principle of doing good work is passed down through continuous generations of teachers to students or from mentors to less experienced professionals.
7. Good Work in Other Societies is a project spearheaded by colleagues at Denmark's Royal Danish School of Education that investigates good work in Denmark and Latvia. In the future, additional international components will be added.

The Project expects to issue a variety of books, reports, and related documentation. The present series, launched in early 2001, includes reports on several of the lines of research mentioned above. For further information on the Good Work Project, contact Professor Howard Gardner's office at 617-496-4929, via email at hgasst@harvard.edu, or through regular mail at 201 Larsen Hall, Harvard Graduate School of Education, Cambridge, MA, 02138.

Papers On Good Work
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1. The Project on Good Work: A Description (April, 2000), Howard Gardner, Mihaly Csikzentmihalyi, and William Damon.
2. The Ethical Responsibilities of Professionals (July, 1998), Howard Gardner
3. The Empirical Basis of Good Work: Methodological Considerations (June, 1997), Howard Gardner, Anne Gregory, Mihalyi Csikzentmihalyi, William Damon, and Mimi Michaelson.
4. Good Work in Business (August, 2000), Kim Barberich and Howard Gardner.
5. Good Work Among Dedicated Young Professionals (July, 2000), Becca Solomon, Greg Feldman, and Marcy LeLacheur.
6. Contemplation and Implications for Good Work in Teaching (August, 1998), Laurinda Morway, Jeff Solomon, Mimi Michaelson, and Howard Gardner.
7. Good Work in a Complex World: A Cross Cultural Comparison (November, 1998), Hans Henrik Knoop and Howard Gardner.
8. Opportunities and Obstacles for Good Work in Medicine (August, 2000), Jeff Solomon, Jennifer DiBara, Sara Simeone, and Dan Dillon.
9. New Media Art: A New Frontier or Continued Tradition? (January, 2001), Kaley Middlebrooks.
10. The Origins of Good Work (April, 2000), Wendy Fischman and Grace Lam.
11. Good Work among Albert Schweitzer Fellows (April, 1999), Wendy Fischman, Becca Solomon, and Deborah Shutte.
12. High Abilities and Excellence: A Cultural Perspective (2000), Jin Li
13. Interdisciplinary Research and Education: Preliminary Perspectives from the MIT Media Laboratory (January, 2001), Dan Dillon.
14. Good Work in Cyberlaw (August, 2000), Evan Zullow.
15. Getting Kids, Parents, and Coaches on the Same Page (2000), Becca Solomon and Howard Gardner.

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Earlier this century, E.M. Forster wrote that we should 'only connect'. The world has followed his injunction. Now all we have to do is learn to live with the connections that we have made.

--Geoff Mulgan, *Connexity* (1997)

I. Introduction

Mike Godwin is not your typical lawyer. In fact, he is not a practicing lawyer at all, not anymore. In the fall of 1999 he left his job as counsel to the Electronic Frontier Foundation (EFF), a nonprofit Internet civil liberties organization, to assume the editorship of *E-Commerce Law Weekly*. The move was not a stretch for Godwin, who was formerly a journalist, a graduate student in English and Psychology, and a computer salesman. However, Godwin spent nine years at the EFF as a lawyer, counseling other attorneys, law enforcement officials, and individual citizens on the application of First Amendment rights to the Internet. In the process, he established a reputation as a tough advocate of civil liberties and was a key contributor to the first Internet-related case examined by the Supreme Court, *ACLU v. Reno*. In a recent book, he recalls the experience at the EFF:

I often think about my good luck when I take the Metro into the District [of Columbia]—my life is nothing like those of the countless lawyers who graduated from law school the same year I did. I don't wear a suit much, and I'm never in a courtroom, yet my 'practice' ranges from criminal law to copyright law to constitutional law. It's a lawyer's job that couldn't have existed a decade ago...My job is, in part, to explain (and sometimes to guess)

how a centuries-old system of law shapes discourse, relationships, and commerce in the newest mass medium, cyberspace.¹

Mike Godwin's story (to which we will return), though unusual, is not unique. As the Internet has become a common medium for commerce and communication, it has challenged our notions of fundamental ideas like speech, property, and privacy. The legal system, which relies upon centuries of precedent to understand and apply these concepts, has been given scarcely a decade or two to rethink them. A small group of lawyers are on the frontline of the discussion, working to reexamine the values which underlie our laws, and adapt them to the new medium. Although most leaders in the legal community will eventually have to familiarize themselves with the current crop of Internet challenges, they will likely begin with the interpretations that are presently being established by Mike Godwin and company.

This is not to assert that these "cyberlawyers" (if you will) are a homogenous collection of civil liberties activists. In fact, the lawyers in this group are almost as diverse a patchwork as the larger legal community, employed at universities, law firms, nonprofits, and the government. Their perspectives and views sometimes contrast sharply, as do those of their clients. However, their stories and concerns are strikingly similar to one another.

¹ Godwin, Mike. *Cyberrights: Defending Free Speech in a Digital Age*. (Random House Inc., NY. 1998.) Intro., x

These consistencies are of special interest to the Project on Good Work, a large-scale social science investigation under the supervision of Howard Gardner of the Harvard Graduate School of Education, Mihaly Csikszentmihalyi of Claremont Graduate University, and William Damon of Stanford University. As broadly defined by the investigators, “good work” in a professional realm has two components: 1) It is work regarded as skillful and successful by other members of the realm; 2) It is done humanely, with other larger communities in mind, reflecting a sense of social responsibility. The project was created to investigate the experiences of leaders (“good workers,” in the parlance of the study) in professions and fields characterized by rapid change, often brought about by technological innovation and the expansion of markets. We seek to understand how exceptional individuals maintain the traditional values of their professions, and their goal of carrying out good work, through changing contexts. Few professions are as steeped in tradition as the law, and it is arguable that no phenomenon in recent times has catalyzed more change than the Internet. We therefore decided to study the individuals who are presently shepherding their intersection.

For our study on Internet Law, or “Cyberlaw,” we interviewed seventeen of these lawyers, using a set of protocol questions adapted from earlier studies on genetics and journalism). Among other things, these questions focus on the beliefs and values that guide an individual’s work; responsibilities felt toward

others; descriptions of one's own attributes; entry into the profession/field; and common obstacles faced and strategies utilized.

The lawyers in our study come from a variety of settings. At the time of their interviews, six of our subjects were employed primarily at law firms (two of whom had very recently moved from jobs in government organizations), five at universities, four at non-academic nonprofit organizations, one at a government agency, and one at a publication. In this paper, we will examine the backgrounds of these unusual lawyers, in addition to their beliefs, goals, and responsibilities.

To preview our findings, our subjects express a great deal of satisfaction with their work, often contrasting their activities markedly with those of the larger legal profession. Many of them came to the practice/study of law from other professions and disciplines, and almost all point to powerful influences outside the profession in which they work. As lawyers, their specific concerns cover the panoply of legal issues impacted by the Internet, including free speech, intellectual property, and privacy.

In addition, our subjects emphasize for us the powerful implications of the Internet itself. They draw our attention to the extraordinary ingenuity and reflection that has characterized the work of the engineers and technologists who created it, and continue to refashion it every day. The lawyers themselves harbor deep loyalties to their own personal visions of what the Internet represents, and what it may one day become. Embedded in these visions is the history of the

medium, and the principles upon which it was designed. However, the lawyers' hopes are potentially threatened, most of all by the commercial development associated with the Net's expansion.

Our subjects' concern for the Internet leads us to believe that a thoughtful treatment of cyberlaw should be as much a discussion of "cyber" as law. It is with this in mind that we begin with a short history of the medium itself, and the challenges to law that mobilized the cyberlawyers.

II. The Emergence of the Internet and the Need for Law

A. An Intergalactic Network

"The thought was revolutionary and for many preposterous...Respected scientists were rolling their eyes and making surreptitious shoveling motions with their hands." So recalls Michael Dertouzos² of a speech given by J.C.R. Licklider in 1964. Licklider ("Lick"), a behavioral psychologist and then director of the Defense Department's Advanced Research Projects Agency (ARPA) Information Processing Techniques Office, was describing his notion that men and computers would one day interact naturally through what he described as an "intergalactic network."

² Dertouzos, Michael. *What Will Be: How the new world of information will change our lives.* (HarperCollins Publishers, NY. 1997) at 35

In fact, “Lick” had been thinking about the possibility for years [as a researcher for the MIT-associated Lincoln Laboratory and later at Bolt, Beranek & Newman (BBN)]. He has outlined his vision in a 1960 piece entitled, “Man-Computer Symbiosis.” Given the technological limitations of the time, few could have realized the prescience of Lick’s imagination.

The first ancestor of the Internet was born under the auspices of the U.S. government. In response to the Soviet Union’s launching of Sputnik, President Eisenhower asked for funds to create ARPA, a research and development branch of the Defense Department. The military establishment saw great potential in the possibility of networked computers capable of distributing stored information and communicating in real time.

Sparked by Licklider’s ideas, ARPA sponsored work at a variety of academic institutions (MIT, UCLA, and the University of Hawaii) and private firms (the Lincoln Lab, BBN). It was this patchwork of research facilities that drove, and utilized, the development of the very first long-distance network, ARPAnet, in the late 1960s and early seventies. Once the computers at about twenty centers were connected, programmers Robert Kahn and Vint Cerf (1974) created a standard protocol³, Transmission Control Protocol (TCP), through which they could easily and interchangeably communicate. The early 1970s were also marked by the invention of the Internet’s first and longest lasting “killer

application,” e-mail. In 1973, Bob Metcalfe, at Xerox Palo Alto Research Center, created Ethernet, a technology which allowed users to network many smaller computers into Local Area Networks which could act as a mini-ARPAnet of sorts, exchanging information within an institution or office.

By the middle of the 1970s, a variety of governmental, industrial and academic organizations began establishing their own computer networks; some examples include the Energy Department’s MFEnet and AT&T’s USENET. The rise of the personal computer in the 1980s fueled the explosion of new users and networks. Federal agencies, led by the NSF (which had established its own NSFnet in 1985), began to merge their resources and vastly expand the infrastructure of the nascent Internet; other countries contributed to these efforts. Use of this “NSFnet Backbone” was limited to research and education purposes, which spurred the creation of competing private networks that would eventually host the first commercial traffic.⁴

B. The Accompanying Ethos

The architects of the Internet were not unaware of the social implications of their work. In fact, they embedded their own spirit of openness and consensus—not to mention distaste for hierarchy—into the infrastructure of the system itself.

³ “Protocol: the rules of diplomacy among computers and related machines. Protocols define how networks organize communication between their own nodes, or between networks.” Segaller, Steven. *Nerds 2.0.1: A Brief History of the Internet*. (T.V. Books L.L.C., NY. 1998) at 384

This spirit is reflected in the technical specifications which underlie the development of today's network, and embodied in the organization (or purposeful lack thereof) of the bodies which set these specifications.

Although the Internet developed as a technological patchwork of "nets" and myriad programming languages, the coterie of technologists who created the original ARPAnet infused in their innovations a few simple, yet significant, principles, which allowed them to collate their work. The most fundamental of these was the notion of "open architecture," described below by several of its creators:

The Internet as we now know it embodies a key underlying technical idea, namely that of open architecture networking. In this approach, the choice of any individual network technology was not directed by a particular network architecture but rather could be selected freely by a provider and made to interwork with other networks through a meta-level 'Interneting Architecture'...In an open-architecture network, the individual networks may be separately designed and developed and each may have its own unique interface which it may offer to users and/or providers, including other Internet providers. Each network can be designed in accordance with the specific environment and user requirements of that network.⁵

In other words, the original Internet was designed so that any computer, no matter what the make or operating system, could access the wider network, as long as it adopted the basic protocols. These protocols, once created, were "open" for anyone to use: free submissions to an evolving digital commons. Underlying this open architecture was the principle of an "end-to-end" design,

⁴ Cerf, Vince et al. "A Brief History of the Internet." <<http://isoc.org/internet/history/brief.html>>

the idea that the common protocols should be kept simple, leaving more complex and varying applications on the computers hooked up to the network. Adhering to this principle has had powerful implications. As Lawrence Lessig writes:

End-to-end expands the competitive horizon by enabling a wider variety of applications to connect and use the network. It maximizes the number of entities that can compete for the use and applications of the network. As there is no single strategic actor who can tilt the competitive environment (the network) in favor of itself, no hierarchical entity that can favor some applications over others, End-to-End assures a maximally competitive environment for innovation...[T]he aim is to keep the transportation layer simple, so as to enable the multiplication of applications at the end.

6

As the Internet expanded during the 1970s and 80s, its creators established a series of standard-setting bodies to insure the integrity of these original design principles. What began as ARPA's Network Working Group has evolved into organizations like the Internet Engineering Task Force (IETF) and the World Wide Web Consortium (W3C). These groups gather engineers from interested academic, governmental, and industrial organizations, and set the new standards by which the Internet (and the World Wide Web) will be expanded.

The technical bodies have been designed in the same spirit as the Internet itself. Organizations like the IETF do not literally "set" new standards by decree, nor do they decide upon them by a vote. In fact, the IETF itself might be hard pressed to call itself an organization. As indicated on its website, "There is no

⁵ *Ibid.*

membership in the IETF. Anyone may register for and attend any meeting. The closest thing there is to being an IETF member is being on the IETF or working group mailing lists.”⁷ Physical meetings are attended by anyone who has an interest—from university network operators to company-affiliated programmers—and the plane fare (meetings are held around the country and world). Individuals get together in working groups, discuss everything from software applications to security issues, and propose new ideas for technical standards in these areas. Once proposed (apparently sometimes through a process in which attendees measure consensus by simultaneously humming), a new standard only becomes such if the computer technologists themselves actually adopt it. This process is embodied in the IETF’s motto: “We reject kings, presidents and voting. We believe in rough consensus and running code.”

The values with which these engineers have designed both the Internet, and their own decision-making bodies, are of particular interest from the perspective of the Good Work Project. The fact that their early spirit has been so carefully maintained (through a lack of traditional structure no less) through the evolution of their invention seems a promising example of “good work.” However, a new set of challenges—fueled by the Internet’s commercial potential—appear to be on the horizon, resting with powerful new stakeholders and their own vision for the medium. Already, the unique decision-making processes of bodies like the IETF

⁶ Lemley, Mark A., Lessig, Lawrence. FCC CS Docket No.99-251

⁷ <<http://ietf.org/tao.html>>

have encountered some challenges. For example, in 1999, when many of the telecommunications companies represented in the Task Force pushed to create standards to facilitate government wiretaps, a flare-up—and temporary schism—arose between these representatives and the more traditionally libertarian members of the organization.⁸ These debates seem a harbinger of things to come.

One wonders how such events will affect the future of consensus and openness, both amongst the technologists, and on the Internet itself. We explore this issue further in Section Five (Proposal One: Architects of the Internet and Web).

C. From Network to Superhighway

In the late 1980s, the NSF continued to shepherd both the technical expansion and regulation of the now burgeoning network. At that point, in contrast to the current Internet, an “acceptable use” policy prohibited commerce of any kind. However, this would quickly change after 1990, with Tim Berners-Lee’s creation of the World Wide Web. The user-friendly visuals of the web page, the convenience of hypertext “linking,” and the subsequent invention of the first web browser (Mosaic in 1993), made the Internet accessible to average computer owners. Finally, in 1992, Congressman Rick Boucher (VA), introduced the legislation that would open the Internet to commerce. The expansion became an

⁸ “Regulating the Internet.” *The Economist*. June 10-16, 2000

explosion, as Internet use through the World Wide Web increased by 341,000 percent between 1992 and 1993.⁹ Currently, there are over 300 million people online¹⁰, with almost half of those in the US and Canada. According to the Commerce Department, the high tech industry has sparked a quarter of this country's economic growth, with almost 56% of US companies now selling goods on the Internet.¹¹

In the last decade, the Internet has grown from a small forum for researchers and skilled computer hobbyists, to an integral source of information and interaction for the average American, and the engine that has shaped an entirely new and robust world economy. The economic growth is, in turn, continuously fueling the expansion of the technological foundations of the network, and further shaping its architecture. The work of standard-setting bodies like the IETF, once the realm of a small group of engineers, has become the concern of an ever-increasing array of commercial interests. As more of our social and economic behavior occurs in this new, ever-changing "space," the potential benefits, and perils, affect us all. Now that the technical infrastructure has been laid, and use has abounded, we face a new set of challenges. A few of the Net's creators elaborate:

The most pressing question for the future of the Internet is not how the technology will change, but how the process of change and evolution itself will be managed. [T]he Internet has always been

⁹ Segaller (1998)

¹⁰ As of March 2000; <http://www.nua.ie/surveys/how_many_online/index.html>

¹¹ <<http://www.internetindicators.com/facts.html>>

driven by a core group of designers, but the form of that group has changed as the number of interested parties has grown. With the success of the Internet has come a proliferation of stakeholders—stakeholders with an economic as well as an intellectual investment in the network. We see...a struggle to guide the Internet in the future. The form of that structure will be harder to find, given the large number of stakeholders... If the Internet stumbles, it will not be because we lack the technology, vision, or motivation. It will be because we cannot set a direction and march collectively into the future.¹²

These challenges have initially fallen, at least in part, on a small group of lawyers versed in the technology, and dedicated to importing the underlying values of our laws into this dynamic new medium. Ironically, some have come full-circle, recognizing the potential to import the values and behavioral possibilities of the Internet into our understanding and practice of the law.

D. Cyberlaw

Emerging as a communications and commercial medium for roughly half of Americans, and a few hundred million worldwide, the Internet has presented new challenges to legislators, lawyers, and judges. Members of the legal profession are attempting to map the rights and restraints of legal traditions into a space which offers behavioral possibilities that could never have been anticipated a few decades ago.

In the middle of this discussion is a relatively small group of lawyers—our subjects and others—exploring the traditions that the profession is attempting to

¹² Cerf et al.

extend. Although many more lawyers are dealing with Internet related cases, it is this smaller group that is framing the issues. As we will discuss at greater length, these individuals, the cyberlawyers, are heavily influenced by extra-legal areas, and have seemingly nontraditional career paths.

Furthermore, they describe their work with unbridled enthusiasm, having found (if only briefly) institutional and collegial support for it.

Disproportionately employed in academic and other nonprofit settings, our subjects express an overall bend towards civil libertarianism, a weariness toward governmental and market forces that they suspect are restricting real-world freedoms in cyberspace.

These lawyers tell us that the Internet has forced the legal community to refocus on perennial “hot spots,” like freedom of speech, while also directing their attention to formerly esoteric areas like encryption. While there is debate over the historical significance of the Internet and its designation as a specialty or field of law, there is no doubt that an abundance of interesting legal issues have arisen. Although these challenges rarely fit neatly into a single branch of law, among those areas most often mentioned by our subjects are First Amendment issues, intellectual property, privacy and encryption/security:

First Amendment Issues

The Internet has been the backdrop for some important First Amendment questions. It is a medium which blurs the lines on which lawyers and judges have traditionally relied to define speech, and to determine what types should be protected or subject to regulation.

At the most basic level, the Internet has forced legal professionals to reanalyze their understanding of what constitutes speech. For example, is the code for computer programs, when disseminated in cyberspace, speech? This question has been the focus of some recent cases. In *Junger v. Department of State*, a professor was sued by the government for posting on his class website, a site accessed by students overseas, the computer code for strong encryption devices. The exportation of this software, designated under U.S. law as “munitions,” is banned, even via the Internet. However, Junger’s lawyers argued (successfully on appeal) that in this case the computer code was a form of protected free speech, and therefore not subject to the exportation ban.

In addition to debates over the applicability of the First Amendment to computer code, the Internet has prompted other questions. Just because some expression (like Junger’s encryption software) is considered to be speech does not mean it is protected. For example, material that courts categorize as “obscenity”, “threat” and “pornography” can all be regulated. Interpreting all of these special designations, and a myriad of others in the new medium has

proven to be another great challenge. In regard to obscenity, determining whether or not some form of speech is obscene relies on “community standards”; how to establish such standards currently in a space where people can congregate irrespective of geographic location constitutes an almost insurmountable task. The notion of what constitutes a threat was challenged in the case of *U.S. v. Jake Baker*, in which a University of Michigan student was arrested for posting on a web newsgroup violent fantasies about one of his female classmates. Authorities alleged these postings rose to the level of a threat, but Baker’s lawyers successfully argued that, in the context of a web bulletin board reserved for violent sexual stories, his writings were protected.

Another form of speech which can be restricted is pornography, and many of the earliest cyberlaw cases involve efforts by the government to do so. The most important of these, *ACLU v. Reno*, centered around the Communications Decency Act, a law passed in 1996 which required the owners of websites containing “indecent” material to create identification checkpoints to screen out minors; the law was later ruled unconstitutional by the Supreme Court. [Among other problems, including tenuous legal definitions of “indecent,” the court believed that the ID checkpoints mandated by the CDA would restrict free adult access to a form of protected speech.] Another series of high profile cases followed, many of these related to attempts by state governments to mandate the use of filtering devices to block what they consider to be adult materials from public library computers.

Intellectual Property

Traditional copyright was designed as a balance between creators/authors and the public, a balance that encourages innovation and creativity by allowing individuals to profit from their innovations while permitting others to access them. One of our subjects, a corporate lawyer and intellectual property expert, elaborates:

[T]he Anglo-American tradition basically says copyright is meant to be a balancing between the economic interests of the author and the interests of the public at large. And, actually, it's meant to give the author just enough economic incentive to publish his work so it becomes a part of a larger body, and so other people can use it.¹³

The Internet has produced many headaches for the owners of copyrighted materials. Text, images, and sounds can be reproduced perfectly and disseminated ubiquitously with minimal cost or time. Complicating the matter is a number of factors, including the wide use of online facilitators like Napster, which allow for the convenient exchange of potential copyrighted materials; and the reality that well over two-thirds of Internet users are outside the U.S., which makes the enforcement of intellectual property protections using law alone almost impossible. In response, industry leaders, particularly those in the music and movie businesses, have adopted technological devices to block unauthorized

¹³ Interview with CL016

use of their property. However, technical blocks can be stripped by skilled and determined computer users.

In response to this and the other challenges, industry groups lobbied Congress to pass stricter copyright protections. One of the first measures enacted was the Sonny Bono Copyright Extension Act (1998), which extended the life of copyright by 20 years. The government also passed the Digital Millennium Copyright Act. Among other things, the law makes it illegal to circumvent the technical barriers applied by copyright owners.

Those of our subjects who specialize in intellectual property raise concerns about the efforts of industry and government to impose stricter regulations. They feel that the new restrictions and technical protections are distorting the original intention of copyright. The aforementioned corporate lawyer outlines this dilemma:

People tend to get absolutist about protection on copyright, not remembering that copyright really is supposed to be a very utilitarian device for getting information out to the public...¹⁴ The legal challenge coming out of all that is both the challenge of how do we blend these new technological restrictions with the legal restrictions in a way which both protects people's legitimate rights, but doesn't basically destroy the value of the Internet as a source of free information.¹⁵

Critics assert that by extending copyright and prohibiting the circumvention of technical productions, the government has rigged the relationship in favor of owners. Traditionally, the balance is, in part, maintained through the idea of

¹⁴ Interview w/ CL016, text 345

“fair use,” which lifts copyright restrictions on materials when they are used for educational and certain other non-commercial purposes. However, technical barriers may soon be capable of an all-too-perfect protection that prevents fair use of any kind. Fearing the potential for piracy in the new medium, the entertainment business and government may be distorting the original intentions of copyright.

¹⁵ *Ibid.*, text 335

Privacy

Probably the greatest concern to our subjects is privacy. Marc Rotenberg, director of the Electronic Privacy Information Center, believes that, “[T]he protection of privacy in the information society is in some ways as great a challenge as the protection of the environment was in the industrial society.”¹⁶ Another lawyer, counsel to a nonprofit organization and an expert on privacy matters, outlines the concerns aptly:

The Internet has an enormous capacity to collect data. Everything that you do online generates information...not just for things that we think of as online, but your grocery store shopping, and everything that you do is becoming part of these databases and distributed networks. And, there’s more data collected, not even because people are trying to collect data, but just the way in which the network works. It generates information about everything that you do. And, there are just enormous numbers of concerns dealing with law enforcement access to that information, private sector use of that information, and I personally think it’s enormous...There’s just so much stuff that’s moving into that environment and it provides for a level of surveillance that, if unaddressed, is just alarming.¹⁷

...There’s a risk as we move into the online environment that everything is going to be tied to identity...[it will be like having] a little keycard at your building, but that everything’s going to be tied directly to your identity and, this again, this big profile of what you do. Imagine that it’s every door you open and every purchase you make, and every interaction, and they’re not separate cards, it’s all one thing. And, you have this rather centralized collection of data, which raises big concerns...¹⁸

¹⁶ Interview with Marc Rotenberg, 1316

¹⁷ Interview with CL010, 954

¹⁸ *Ibid.*, 996

The Internet certainly does provide unprecedented ability to gather information about individuals and their behavior. Websites and associated advertising agencies can leave “cookies” on the computers of individual users which track their online preferences; companies can collect and sell this type of information. One advertising company, Doubleclick, raised serious concerns after buying Abacus Direct, a marketing database which includes the names, addresses and buying habits of over 90 million people. Doubleclick planned to combine its anonymous online records with the identifying information, until the move was delayed under pressure from privacy watchdog groups. In addition to the ability of website operators and advertisers to track online movements is the near perfect surveillance under which employers can legally track employees. These and other factors have some agreeing with Scott McNealy, Sun Microsystems C.E.O., who recently told a roomful of reporters, “You already have zero privacy—get over it.”¹⁹

Compounding apprehensions is the perception that, from a legal perspective, relatively little is being done to correct the problem. The government, under the leadership of the FTC, has opted instead to encourage industry leaders to create their own standards for privacy protection.²⁰ The one area where legislators acted directly was to pass legislation banning the unauthorized collection of data on websites that cater to minors (the Child Online Protection Act).

¹⁹ Quoted in Rosen, Jeffrey. “The Eroded Self.” *NYTimes Magazine*. April 30, 2000

However, many privacy experts and other lawyers with whom we spoke feel this is simply not enough. They point to long tradition in the U.S. of protecting privacy, dating back to late nineteenth century, when Samuel Warren and Louis Brandeis first introduced the notion that the Constitution protects the “right to be left alone.”²¹ They assert that “fair information practices,” a baseline level of personal information protection (of the type introduced by the 1974 Privacy of Information Act), should be legally applied to data collection in the new medium. In fact, some say, it is these American privacy precedents that the European Union has modeled in legislating its own protection standards for the Internet, something the U.S. itself has yet to do.

Encryption & Security

Just as the Internet may be compromising privacy, it may also enable us to achieve new levels of security. Encryption technologies are now routinely used to scramble everything from email messages to credit card numbers exchanged online. Businesses, in particular, rely on these technologies to secure online transactions, both in the U.S. and abroad. As hackers have increased in skill, commonly-used encryption software has grown in strength. The use of these devices has created anxiety among many in the security and law enforcement

²⁰ Christine Varney, FTC Commissioner, Privacy & American Business National Conference. October 9, 1996.

communities, who have long relied on their superior ability—relative to citizens and foreign governments—to encrypt and intercept communications.

It is currently illegal to export—including via the Internet—“strong” encryption devices; in fact, the government officially regards them as “munitions,” and they are regulated by the same statutes that ban the export of weapons-grade nuclear materials. However, like many other things on the medium, the government is groping to enforce these regulations. As the bar for what constitutes “strong” is raised, any international transaction over the Net—or laptop taken abroad—could contain illegal encryption software. In the meantime, many foreign countries are simply creating their own devices; they could corner more of the international market, both for the software itself, and for the types of transactions it secures. The ubiquity of strong encryption, and its development abroad, may leave American regulations unenforceable and ineffective.

As a result, many private citizens and public officials in the U.S. criticize the government’s current policies. Some individuals, like Junger, are challenging the constitutionality of the policies in court as a violation of free speech. In fact, litigation and general criticism have prompted the government to reconsider its ban on the exportation of strong encryption. As a government lawyer close to the encryption debate tells us, “[A]s of January 2000, [the government] has made

²¹ Samuel Warren and Louis Brandeis. *The Right to Privacy*, 4 Harvard Law Review 93 (1890); taken from Varney(1996).

the decision to allow the export of a lot of powerful encryption items.”²²

Ultimately, he says, the decision will be made in Congress, and not the courts, where he is currently involved. However, as legislators relent in the face of the technical and commercial realities, new problems could arise: “The challenge is going to be to protect the public safety to the extent that encrypted communications are increasingly utilized by terrorists and criminals in their various plots to harm the public.”

Law enforcement officials, however, have not limited their attention to foreign powers and terrorists. With all of the strong encryption used within the U.S., sensitive information is more often passed between computers. The FBI, which has long relied upon its wiretapping ability, has spent years pushing for a “key escrow system,” whereby all computers would be required to register a de-encryption “key” with the government. This proposal and others, like the “Clipper Chip,”²³ have drawn the criticism of many of our subjects, particularly the civil libertarians of the group.

The government, Mike Godwin believes, “is] desperately afraid of losing the ability to wiretap...they’re driven by fear of cheap computing and networking, and the fact that people are outside of U.S. jurisdiction, and also the fact that

²² Interview with CL013, 700

²³ An encryption device that is installed in the hardware of a computer and would allow law enforcement officials to access and unscramble materials, much the way they can now wiretap. The Clipper Chip was promoted unsuccessfully by the Clinton Administration mid-decade as a standard addition to personal computers.

their own citizens may not be as easily monitored as they used to be.”²⁴ He and others view the current debate as an opportunity to question the very necessity of the practice. Godwin asserts, “[F]or most of human history, governments couldn’t monitor private conversations. It’s really only recently that governments thought they could do so routinely.” It is, in large part, voices like his which have fueled the policy discussion, and the ongoing court battles in this area.

III. The Cyberlawyers

The lawyers we spoke with are facing an unusual set of challenges, with implications not only for the traditional frameworks of law but the very nature of social structures themselves. Although roundly skilled and respected, many of our subjects, at least on the surface, appear to be less *of* the law than *in* the law. They come from other disciplines and professions; often work more as teachers, advisors, and commentators than practicing attorneys; infuse ideas from areas like political theory, natural and social science into their analysis of the law; and most often work in settings other than the most prestigious law firms, where most with their education and talents reside. However, the role they are serving as lawyers, educating a variety of larger communities and facilitating discussion,

²⁴ Interview with Mike Godwin, 1644

appears to be a very traditional one. In fact, in light of some of the modern trends in the legal profession, they may be reconnecting with a fading ideal. Before more fully examining these possibilities, and the other attributes and experiences of our subjects, we briefly return to the story of Mike Godwin.

As a computer hobbyist in the mid-1980s, unsure of his career path and wandering through different jobs and doctoral programs, Godwin (then in his late twenties) discovered the Internet. There he found what he had always been looking for, the “life of mind”²⁵: the ability to congregate with thoughtful people and exchange ideas. He began spending more and more of his time online, and joined the “Whole Earth 'Lectronic Link” (WELL),²⁶ a famous online community (or self-described “gathering place”), where he met his future wife.

As a law student in the 1980s, Godwin began to notice that law enforcement officials, in an attempt to crackdown on what they feared was a growing movement of computer hackers, had started to confiscate the computers of individuals who simply recounted the stories of hacker friends, as well as those who used colorful online pseudonyms like “the Executioner.” These individuals, many of them adolescents, were accused of charges like criminal conspiracy, and their equipment was taken away. Rarely were any charges filed; Godwin believed the point was merely to bully them. He also recognized that these individuals, some of them his own acquaintances, were being punished not for

²⁵ Interview with Mike Godwin

²⁶ <<http://www.well.com>>

something they did, but merely for something they had said. As a former journalist, and in time a lawyer, he believed this was a violation of free speech, and he set out to defend them, in part by counseling them online.

Godwin's work online quickly caught the attention of Mitch Kapor, entrepreneur and founder of the EFF. On the basis of Godwin's Internet postings, Kapor hired him. There he continued his free speech work, delivering lectures at the FBI Training Center in Quantico and other law enforcement agencies, and jousting with prosecutors and police officers.

However, in the short time since the early campaigns against hacking, government agencies began to turn their attention to another area, online pornography. The Internet of the early 1990s was still a place of relatively unimpeded access and unregulated behavior, and many of its most adept navigators were children. Parents and legislators in the U.S. began to worry that youngsters could easily view sexual material. In 1995, a study was published in the *Georgetown Law Journal* which claimed that over 80% of material posted on Internet newsgroups was pornographic. The results of the paper quickly found their way into a *Time Magazine* cover story, and early grumbling about Internet pornography turned into a minor public panic. Upon close reading, Godwin quickly discovered that the study was a fraud, and launched an Internet writing campaign which ultimately forced *Time* to acknowledge that fact.

However, the damage to public opinion had already been wrought. Legislators quickly moved to regulate the Internet, and in 1996, the

Communications Decency Act (CDA) was passed into law. The CDA, which required adults to identify themselves with credit cards and other special registration devices, immediately struck free speech activists as unconstitutional. The ACLU filed a case against the government. And again, Mike Godwin got involved, counseling lawyers at the ACLU as the case quickly moved to the Supreme Court, where the CDA was in fact deemed unconstitutional. Looking back at his journey from computer sales to America's highest court, Godwin comments, "[F. Scott Fitzgerald] said there are no second acts in American lives, but I think that is not necessarily true. I think there are second, third, and fourth acts if you manage to survive the first."²⁷

A. Unusual Career Paths

Given his early wanderings, Mike Godwin's path to (or more accurately, "through") the legal profession and into some of the most significant civil liberties battles of the last decade, may seem entirely serendipitous. However, many of our subjects came to law, and cyberlaw, through similarly circuitous career routes.

Take, for example, one subject, a female professor. An expert on intellectual property and Internet law, she was once a doctoral student in music who began her legal career as a law firm secretary in the late 1960s. When the firm began relying on her to draft legal memos, at almost thirty years, she realized she had

²⁷ Interview with Mike Godwin, 1225

an acumen for the law. Moreover, within the profession, she perceived a “chance for social change” that was missing in her earlier academic work on music. As a vocal student demonstrator and a young woman in the 1970s, many doors were closed to her by potential employers. After law school she did secure a teaching post and has been a professor for the three decades since. In regard to her recent interest in Internet issues in the 1990s, she in part points to her past experiences, telling us, “I didn’t do it by the straight and narrow. So I’m a maverick. I guess that makes cyberlaw easier for me to get into. I want to do interesting things and I’m not afraid to do something new.”²⁸

B. Influence Outside the Law

A number of the lawyers we spoke to came to the practice/study of law after extensive work and interests in other disciplines and professions, including anthropology²⁹, computer science/programming³⁰, music³¹, political science³², and even the military³³. Our subjects point vividly to influences outside of the profession of law, which have shaped their interest in Internet issues, and the underlying beliefs and values that guide their efforts.

²⁸ Interview with CL015, 362

²⁹ See Interview with Ann Besson

³⁰ See Interviews with Jonathan Zittrain, Marc Rotenberg, CL014

³¹ See Interviews with CL009, CL015

³² See Interview with Pamela Samuelson

Computers

The most obvious and seemingly applicable outside influence would appear to be in computer technology. Several of our subjects draw from such experience. Jonathan Zittrain, now thirty, was online at the age of twelve, his early adolescence paralleling that of the pre-World Wide Web Internet. In fact, he worked as a Systems Operator (or “sysop”) for CompuServe, administering online discussion groups; and by age thirteen, he was writing a regular column in *Computer Shopper*. His current work as a lawyer and professor seems greatly influenced by the early spirit of the Internet itself. In talking about the Berkman Center’s efforts to post most of its work on its website—and to “webcast” meetings held by the new private domain names allocation body—he points to his own guiding values of “openness” and “inclusiveness.”

Although few of the other subjects established themselves in the computer community as early in their lives, several others were guided into cyberlaw through the use of computers. Marc Rotenberg, for example, worked as Teaching Assistant for computer science classes as an undergraduate. In computer science, he notes, “There is really respect for truth and the belief that you really have to think seriously about what the right answer to a problem is...

³³ Interview with CL016

I admire people who view the world that way, that everything is not simply relative.”³⁴

Other disciplines

Several of our subjects pursued non-legal degrees, even different careers, before deciding to become lawyers. These outside influences not only shaped their interests in law, but also left them especially attuned to issues raised by the Internet. Before going to law school, Ann Beeson, staff attorney at the ACLU and an architect of the organization’s case in *ACLU v. Reno*, spent years as an anthropologist. As a researcher, she studied the welfare system and the efficacy of drug prevention programs on communities in San Antonio, TX. Although she enjoyed the work, she questioned the impact it was having:

But we were very frustrated because we would do this great work and nothing would really ever come of it. We would write these really fabulous reports and submit them to all the proper people in the state legislatures but we were academics. Nobody listened to us, and if they did it moved very slowly in terms of actually achieving social change...That’s what specifically gave me the idea of going to law school. I thought, I love to do this social justice work, I’m frustrated doing it as an academic, maybe I’ll get a law degree and do public interest work that way. So that’s what led into it.³⁵

As a lawyer, Beeson became particularly interested in First Amendment work, which she attributes to a belief in cultural relativism adopted as an

³⁴ Interview with Marc Rotenberg, 1487

³⁵ Interview with Ann Beeson, 827

anthropologist. As someone who had spent years studying the dynamics of communities, she recognized a relevant new backdrop:

If I was to credit anything, I actually do think that my interest in the [Internet], and the way I went about thinking about it, was definitely influenced by my background in cultural anthropology. That was really part of my interest in cyberspace generally as sort of a place where new communities were thriving and new ways of communication were being developed.³⁶

In the Internet, Beeson saw a space where otherwise isolated people, especially teenagers, were able to commune and offer one another information and support. In the ACLU's case against the CDA, which was aimed at censoring pornographers, she sought to bring these other unheard voices to the courtroom. According to Beeson, this strategy was also informed by her previous work:

When I was doing my graduate degree, the big, hip theory, was Narrative Theory, as a cross-disciplinary theory. And I did a lot of work on that as an anthropologist, and still feel like the ability to tell a story and convince people and persuade people not through a bunch of bland cases but by telling a story and convincing someone of your story is the way to win. So I've combined my legal analysis to that kind of approach...

I think more like a cultural anthropologist than I do a lawyer. Certainly I do in terms of trying to find clients. The laws on their surface are meant to target pornographers, so most people would assume that if you go to try and get a law like that struck down you're going to represent pornographers, for example. And so we had to be very creative...³⁷

³⁶ *Ibid.*, 394

³⁷ *Ibid.*, 395

... We felt very strongly and still do that it was absolutely crucial that we educated the court about the nature of the medium, and second of all how to listen to, I mean personally see on the stand these people who are at risk and listen to their stories. And that was the only way we were going to get a law that was aimed at pornographers struck down.³⁸

Beeson continues to bring her perspective as an anthropologist to bear on the more recent First Amendment cases which have arisen since *ACLU v. Reno*.

Although the majority of our subjects have not dedicated quite as much time to other disciplines, most point to important influences and perspectives in areas outside of the law. This seems to be more than coincidence; in fact, a few of our subjects noted the relative abundance of extra-law interests, degrees, and careers among their ranks.³⁹ In their view, and in ours, these outside perspectives have helped some of our subjects to understand the implications—legal and otherwise—of cyberspace in a way the “average lawyer” might not. During this time of change, the challenges introduced by the Net are at the intersection of a number of technical, legal and social disciplines. As a result, the legal profession is relying on relative outsiders (in the form of former journalists, anthropologists, etc.), with interdisciplinary backgrounds, to adapt its understanding of law to the Internet. Pamela Samuelson attempts a broader explanation for this observation:

[A]t a time when you’re groping around for what are the right concepts, what are the right ways of thinking about things, [asking]: what’s the framework within which to understand this phenomenon? Then knowing something more about the phenomenon, knowing something more about frameworks that

³⁸ *Ibid.*, 464

³⁹ See Interview with Andrew Shapiro

other organizations are using, or other institutions or fields are using to understand a phenomenon, gives you a chance to see what those models are that then might be imported over to become part of a legal frame. So, I think this is part of we're scouring the earth for good models. And, then once we have those good models, then we can use those as the foundation and then out from there, then we do the permutations within the legal framework that then have been constructed on those things. But, while we're in this mad dash for good models, I think that's the time when you open up the discourse to those wider things. And, then once you settle on something that you're relatively satisfied with, then it's maybe not as necessary to go out and reach outside.⁴⁰

Some of our subjects openly question whether an education in “legal frameworks” is enough to engage in this interdisciplinary work. Andrew Shapiro—who himself works at the intersection of technology, policy, and law as a consultant, lecturer and popular writer—believes that the legal profession may be particularly unsupportive of it:

I actually don't think the law is necessarily a good breeding ground for the kind of people who are able to break out of molds because the law is all about structure. It is all about certain boundaries and certain constraints, and one has to have some other perspective on life, other than just law—to be a very malleable and open person to have that kind of view of things.⁴¹

As we observe, our subjects strongly manifest both this “other perspective” and a great deal of “malleability.” To the extent we accept Shapiro's statement, we are left to wonder why some of our subjects are in the legal profession to begin with. Although their reasons vary, a few (including Mike Godwin, Ann Beeson, and Shapiro) came to the law to pursue the distinct interests they

⁴⁰ Interview with Pamela Samuelson, 625

originally developed in other disciplines. The law simply offered a vehicle for ideas they were already committed to (e.g., the significance of speech, community, etc.). Cyberlaw, in particular, offered a confluence of uniquely supportive institutions and colleagues for these missions. During this period of great change, the legal profession has turned to interdisciplinary institutions and individuals which might otherwise be relegated to its periphery.

However, in regard to the legal profession, this need for interdisciplinary cyber-thinkers may be fleeting. Most of our subjects agree that, regardless of the extent to which cyberlaw is a distinct entity (discipline, field, specialty, etc.), it will eventually be absorbed into traditional law, possibly as one of many critical perspectives like Law and Economics or Feminist Legal Theory. Given this distinct possibility, what will become of all the interdisciplinary-minded individuals who have guided the profession through this brief period of turbulence?

“I think they would be doing something else,”⁴² says Andrew Shapiro, a lawyer and Senior Advisor at the Markle Foundation, “This is the interesting time...and it won’t be that attractive to work on cyberlaw when everything else is cyber, when it has permeated the other fields.” According to some subjects, they and others would simply move into different areas of law. We wonder if a few might not leave the profession altogether (as Mike Godwin did). For those

⁴¹ Interview with Andrew Shapiro, 438

⁴² Interview with Andrew Shapiro

who stay, we wonder what their experiences will be like, especially in light of their observations of the larger legal profession.

It is with this in mind that we take a look at something which may further distinguish our subjects from their colleagues who practice in other areas of law.

C. Happiness Lost and Temporarily Found, in Cyberspace

In her recent book, *A Nation Under Lawyers*, Mary Ann Glendon asserts that the legal profession is experiencing a period of great discomfort. Lawyers, she tells us, have become a generally unhappy lot. In considering the trends which may have brought this malaise, she asks, “Why are so many lawyers so sad?” In contrast, most of the cyberlawyers we interviewed are enthusiastic about their work. In light of the trends observed by Glendon and other observers, we are left to wonder why so many of these lawyers are so happy.

A Profession Misaligned?

The legal profession has always occupied a dubious place in the American psyche. In his best-selling novel, *A Civil Action*, Jonathan Harr provides an abridged “history” which well reflects popular perception of lawyers:

Lawyers in America have never been well liked, One of the first lawyers to arrive in the New World was an Englishman named Thomas Morton, who landed at Plymouth Colony in 1625, four years after the Pilgrims. Two years later he was jailed for trading

firearms to the Indians and then expelled from the colony. In Massachusetts, fifteen lawyers practiced the profession in 1740, collecting debts and litigating disputes among merchants. By the time of the Revolution, that number had grown to seventy. For some citizens, lawyers had become ‘cursed hungry Caterpillars’ whose fees ‘eat out the very Bowels of our Commonwealth.’ Two hundred years later the basic complaint remains the same.⁴³

In addition to the sometimes unflattering public image, lawyers are often portrayed as unhappy. Mary Ann Glendon writes:

Lawyers have never wielded more political and economic power than they do today; yet they report a declining sense of control over their own lives. American lawyers are the wealthiest in the world; yet in all branches of the profession lawyers reported that their levels of satisfaction with their work plummeted by 20 percent in the six years between 1984 and 1990...College graduates flock to the nation’s law schools; yet nearly one lawyer in four says he would not become an attorney if he had to do it over again. In influence, affluence, and prestige, practicing lawyers surpass most other occupational groups; yet there is a high incidence among them of clinical depression, and conservatives estimates say one lawyer in six in a problem drinker.⁴⁴

According to Glendon, however, this was not always the case. She recounts a “golden age” of law, between the 1920s and 60s, when lawyers were looked up to by the public, a time when attorneys’ conception of the goals of law was more aligned with that of laypeople. During this period, she claims, law firms offered secure lifetime employment to their partners, who shared profits equitably

⁴³ Harr, Jonathan. *A Civil Action*. 1996. 56

⁴⁴ Glendon, Mary Ann, *A Nation Under Lawyers*. (Farrar, Straus and Giroux, NY. 1994) at 15

among themselves. They were more likely to offer job security to young associates, and to steer clients away from costly confrontations.

This period helped shape our early modern notions of the ideal lawyer. Glendon describes him as the “wise counselor,” a trusted advisor to clients, yet a loyal servant to a wider system and public—one whose judgment in avoiding conflicts was as important as his skill in winning them.

This all began to change in the 1970s. In the interest of saving money, law firms began to fire less financially successful associates, and eventually even partners. Profit sharing was at least partially replaced by an “eat what you kill” policy, and the billable hour became a more influential stressor for the average firm lawyer. In Glendon’s view, the focus for many skilled attorneys shifted noticeably from judicious counsel and a spirit of service to the wider legal system, to a profit-driven advocacy of clients. In this new reality, the mostly prestigious practice of law is more closely associated with the most lucrative. According to Ralph Nader, this emphasis on profit and “zealous advocacy” has served to distort the function of the U.S. legal system. He asserts that, “Money has become the mother’s milk of systematic legal abuse,” and warns that:

Unless tempered by adherence to the higher calling of professional honor and restraint, unquestioning client loyalty can cause profoundly adverse consequences. The lawyers devolves into a hired gun, where, as in the old Westerns, an ethic of might-makes-right prevail...In such an atmosphere, those without wealth or influence simply cannot compete, and they avoid using the legal system. Justice grows scarce and cruelties abound.⁴⁵

⁴⁵ Nader, Ralph. Smith, Wesley J. *No Contest* (Random House, NY.1996) at 16-19

Of course, there have always been lawyers driven primarily by profit and clients with dubious interests, even during Glendon's "golden age." In recounting these observations of the last few decades, we do not seek to romanticize the past—only to introduce the perception that the legal profession and lawyers have changed. Several of our subjects give voice to this view. Charles Nesson tells us, "Core legal business has changed enormously in the past fifty years. It's gotten grim, corporatized. We need to return to the ideal of lawyers as somebody with judgment who is able to look at a problem as a whole and take a line of attack."⁴⁶ Another subject elaborates:

I think the professional ideals are in conflict with the market reality. Law firms have to compete for business, and they've all hired marketing directors, and they all are marketing as much as they can. They have to make the client think that their prices are better and their product is better. And so they have to do that, too. And if a client wants to do 'X' and you are saying, I think 'X' is kind of a shady practice, the client can go to another firm which will help them do 'X.'⁴⁷

In fact, one of our subjects, a professor, has given up on even the idea that lawyers should be expected to resist this "conflict with the market reality." "I'm willing to treat law as a business like any other business," he tells us, "I don't see any reasons why lawyers have to be of better moral character than investment bankers. If you took a survey you would probably find more people thinking

⁴⁶ Interview with Charles Nesson, 568

⁴⁷ Interview with CL015, 1067

that lawyers were of lower moral character.”⁴⁸ It is worth noting that even investment bankers, at least in theory, rely on their clients’ trust and faith in their integrity. Unlike investment bankers, however, lawyers were once perceived to have a function beyond conscientious and skilled service to clients—as servants of a broader public interest.

In fact, in light of the statements made by critics and our subjects, the law might be characterized by investigators at the Good Work Project as a “misaligned” profession. In an upcoming book, based on interviews with geneticists and journalists, Gardner *et al.*⁴⁹ outline a framework for understanding the conditions under which a profession can fall in and out of periods of health (“alignment”) and malaise (“misalignment”). They hypothesize that these states can be predicted on the basis of four variables that correspond to the beliefs and values of a domain (all of the “knowledge, skills, practices, rules” of a professional realm; in this case the law itself), the field (the current institutions that support legal work; e.g., law firms, the government, universities, small nonprofits, and other organizations), the stakeholders (anyone with an interest—including financial—in the work of a professional realm; e.g., leadership in law firms, clients, the general public), and the individual (members of the professional realm). A profession may experience alignment when the

⁴⁸ Interview with CL008, 632

⁴⁹ Howard Gardner, Mihaly Csikszentmihalyi & William Damon. *Good Work*. Forthcoming in 2001.

values in all four of these areas accord, and misalignment to the extent that they conflict.

According to the observations offered by Glendon, Nader, and many of our own subjects, a conflict has arisen between the values of some of stakeholders—in the form of gun-for-hire lawyers, and the firms and clients which encourage them—and a traditional pillar of the domain, namely the ideal of the “wise counselor,” and the aspiration to serve to the wider public interest. Those who enter the profession hoping to emulate this ideal may have to do so at the expense of clients’ self-interest, and could find themselves alienated from a substantial proportion of their colleagues and some of the most prestigious institutions.

This could, in part, explain why so many of our subjects work at universities and other nonprofits, applying their legal knowledge but not practicing; whereas most attorneys work either in firms or private practice.⁵⁰ For many, the decision to work in the institutions they do, and possibly to pursue cyberlaw, sprang from their disillusionment with a perception of the “normal” practice of law. A few of our younger subjects offered accounts of this disappointment. Andrew Shapiro, 32, after graduating from Yale Law School and upon completing a prestigious judicial clerkship, found the prospects rather “dim”:

[I]t would have taken me another ten or fifteen years to get to a position as a practicing attorney where I would have had that opportunity to really be marshalling the arguments and making a

⁵⁰ <<http://www.richmond.edu/~polisci/prelaw/#profiles>>

case on my own, as opposed to working under someone, to get to partnership in a law firm. And, then even as a junior partner you are not calling the shots in a big important, interesting case.⁵¹

Internet issues provided him with the immediate opportunity to contribute his legal training in a more immediate and significant fashion, as a writer, lecturer and consultant. Jonathan Zittrain expresses similar disappointment with his first and only experience at a large private law firm.

It just seemed really boring. I could not see how what I was doing there connected to the rest of the world in a way that made any real difference. It just was not for me...I spent about two and a half weeks there and just said, 'Thanks, but no thanks. This just is not working.'⁵²

Guided by their interest in areas like public policy, journalism, and computer technology, our subjects often decided to apply their legal knowledge through institutions other than the law firms and practices where most attorneys reside.

An Oasis of Alignment

In light of the opinions voiced on the legal profession, it is relevant to note that one of the most striking cursory observations, consistent among the vast majority of our subjects, is the satisfaction and excitement they express over their work. "It's so much fun," says one small firm lawyer, who counsels budding Internet companies, "[T]he clients are fun and creative...It's building, growing,

⁵¹ Interview with Andrew Shapiro, 362

⁵² Interview with Jonathan Zittrain, 1303

helping.”⁵³ Although many of our subjects, as professors and nonprofit counselors, do not represent clients in this capacity, most express similar sentiments.

There could be a number of reasons for this. First, many of the lawyers enjoy dealing with Internet issues because they are so new. As Ann Beeson tells us, “[Internet Law] is much more interesting than a lot of run-of-the-mill litigation, in which the law is clear, you apply the law to the facts of your particular case and that’s all there is to it...there’s not a lot of new thinking that has to happen, where as in our cases there are.”⁵⁴ There is also the great import of Internet issues themselves; a prominent corporate lawyer expounds, “[W]hat makes me so enthusiastic about cyberlaw is that it really is intellectually stimulating and it puts you right at the center of this critical economic transformation which is going on right now through the Internet.”⁵⁵

One subject in particular, a counsel for a nonprofit organization, provides additional insight into what may underlie all of the reported satisfaction. Without many of the conflicting pressures felt by other lawyers—profits, clients with potentially ignoble goals—she appears to have found an “oasis of alignment” (if you will):

I like the fact that it’s very inventive and just incredibly creative, and very multidisciplinary in a way that a lot of law, I think, is not...I enjoy the issues themselves. They are compelling and they

⁵³ Interview with CL002, 45

⁵⁴ Interview with Ann Beeson, 377

⁵⁵ Interview with CL016, 1284

are the things I care deeply about...I have what I believe is an enormous luxury in that I don't think I've ever has to say something I do not believe in...[Y]ou may lose a little on the financial side, but *you do have the ability to care a lot about what you do, and probably to have your work and your personal values aligned.* [italics added] ⁵⁶

The goals of her institution, to protect constitutional rights online, mirror her own. Among our subjects, it appears she is not alone; for many, work seems a natural extension of the personal beliefs and values they articulate. Certainly this reported alignment could be attributed to the fact that most are leading members of the organizations—whether these be nonprofits, academic centers, law firms—in which they work. However, in many cases the positions they occupy, and the very institutions they are leading, would not exist without the societal and legal challenges brought about by Internet.

D. Assuming a Broader Role, Recognizing the Ideal

One may speculate that the myriad of sudden challenges posed by the Internet have left both the legal profession, and the wider public, in particular need of “wise counselors” to prompt discussion and educate us all. The variety of issues raised by the Internet have provided for the confluence of many actions—if not actors—in the “ideal” ilk described by commentators like Mary Ann Glendon.

⁵⁶ Interview with CL010, 807

A whole industry of lawyers has begun to extend its practices to incorporate Internet behavior and commerce. Most will gradually work within the new frameworks that are being established. They will study the precedents that are being set, and their day-to-day endeavors are unlikely to change drastically as a result. Our subjects, by contrast, are laying the groundwork for a legal understanding of the technological changes that are taking place. Because of the Internet, the backdrop is changing so quickly it has forced these cyberlawyers to ask fundamental questions about the social values and complex interrelationships upon which legal regimes are based.

Just as the dilemmas posed by the phenomenon extend beyond lowercase-‘law,’ so do the goals of our subjects, and the constituencies to which they see themselves responsible. They describe lawyers in general as having a responsibility to clients, their institutions, the integrity of legal system in general, and sometimes to the general populous (or “public interest,” as it is often phrased). The subjects who have clients voice a commitment to them. However, most speak more at length about their responsibilities to a variety of larger communities. Those subjects whose beliefs and values have been shaped by those of the medium itself, articulate a responsibility to the “Internet community at large.” In addition to larger constituencies, some subjects express a sense of

responsibility to the principles that they feel guide their work, for example, the value of free speech⁵⁷.

Many of them, whether or not they work in the academy, see themselves as educators, facilitating discussion among other lawyers⁵⁸ and law students⁵⁹, politicians⁶⁰, law enforcement officers⁶¹, technologists, and other interested parties. For some subjects, part of their goals is to impart the values underlying the medium and the new possibilities it presents; as Jonathan Zittrain tells us:

I honestly believe that technology, generally, and certainly networked technology, specifically—Internet stuff—is going to play a wildly increasing role in our lives and much more of our lives will be lived on and through it. So a broader goal is to get people to see that the evolution of these technologies could go in any number of directions. It is not ordained to be one way or another. And that they ought to have an opportunity for a voice in determining the direction it goes...⁶²

... part of the good feedback that keeps me coming into work each day is when I can successfully translate a complicated subject, try to understand it to some extent myself, and then successfully translate it to someone else who doesn't consider herself an expert in the field. I feel like a lot of what I spend my time doing is that kind of translation. I try to make it an honest translation, a loyal one. And that provides a lot of satisfaction.⁶³

For those subjects who counsel political leaders, this process is often grounded in an addition desire: to insure the very health of democracy, both on

⁵⁷ See Interview with Ann Beeson, 956

⁵⁸ See Interview with CL014

⁵⁹ See Interviews with Jonathan Zittrain, Andrew Shapiro, Charles Nesson, Marc Rotebnberg, Pamela Samuelsom, CL008, CL015

⁶⁰ See Interviews with Jonathan Zittrain, Marc Rotenberg, CL010

⁶¹ See Interview with Mike Godwin

⁶² Interview with Jonathan Zittrain, 1207

⁶³ *Ibid.*, 1188

and off-line. Marc Rotenberg, who often testifies before congressional committees, elaborates:

I have a very strong political view about the importance of a vibrant and robust democratic form of governance. I mean, really, the democratic government should be made to work. You almost have to force it to work even when people in institutions don't seem particularly interested in its operation.⁶⁴

[When] you think about people like Darrow and Brandeis and Tony Amsterdam, there is something that can be very uplifting about the law and the protection of liberty and the strengthening of democratic structures. And, I'm trying to understand how we do that in this new world.⁶⁵

This involves not only prompting thought and action on the part of politicians, but also on the part of the public at large:

Brandeis talked about the need not only to seek certain ends, but also to engage in a transformative process that would give people a stake in their common political lives...That's part of what we're trying to do.⁶⁶

...giving people a greater sense of interest and outcomes; trying to politicize people in a positive way; politicizing people in the sense of trying to make people understand what common interests are and what problems of collective actions are.⁶⁷

Of course, not everyone has the luxury to spend all of his or her time representing the general public, or even institutional/personal principles. It is much easier to do so as an academic, who has no clients, or as a public interest lawyer, who can choose the individuals/organizations she/he wishes to

⁶⁴ Interview with Marc Rotenberg, 155

⁶⁵ *Ibid.*, 1603

⁶⁶ *Ibid.*, 580

⁶⁷ *Ibid.*, 1301

represent on the basis of an institutional ideology. Private lawyers certainly have less leeway in choosing their constituencies. Despite this, a handful are contributing to academic and ideological discussions on Internet issues, the content of which may not always be in the best interests of their paying clients. In articulating their responsibilities, a few of the handful of private lawyers with whom we spoke draw a distinction between their roles as advocates and as contributors to this broader realm. As one prominent corporate lawyer put it:

I view myself as having a professional obligation to my clients—my professional opinion of the way things should be—and then I have my opinions as a citizen. And when I am in different roles, that may affect particular issues differently.⁶⁸

However, in voicing his personal opinions on the issues publicly, he must do so with a good bit of care:

Well, there have been situations where I have mentioned things in my articles where there has been kind of a blowback. I generally tend to be sensitive to these issues, certainly for the clients I represent, and not taking positions which are dramatically averse to them, which would be unfair to them, particularly since I represent them...it is a balancing act and it's a matter of being sensitive. There are a number of situations in which I just won't comment on developments, because there isn't a good way of avoiding getting yourself in trouble, and so there are some realities there as to what you can do.⁶⁹

Another corporate lawyer, whose interests have been heavily shaped by his exploration of Internet technology, voiced a “disappointment” he sometimes experiences when catering to clients’ needs:

⁶⁸ Interview with CL016, 635

⁶⁹ Interview with CL016, 651

[T]here certainly have been times when I've felt some disappointment that the client's particular situation and interests have led to a resolution that didn't fully explore the potential of the space [Internet]. There inevitably are lots of situations where the client's goals are quite pragmatic and immediate and where a compromise...is driven by the extent to which the client is embedded in a particular way of looking at the world...⁷⁰

...the client's problem is typically a particular instantiated event and if you can reach the desired result without reformulating the theory of the cosmos, you certainly do that.

Although these firm-employed lawyers are contributing to a broader discussion on Internet issues, in the end they must work within the interests of their clients, and those of their institutions. This clearly limits their freedom to express their views in public forums. Even during our interviews, the lawyers from private firms were reluctant to comment beyond a general discussion of the issues, in an effort to avoid mentioning developments related to specific clients or cases.

Lawyers at universities and other nonprofits on the other hand, although sometimes bound by their own institutional politics and pressures, seem freer to express their views (as they did during our interviews). They have used this freedom to command center stage in the intellectual debates on cyberlaw. However, this has come at a price: as wealthy dot-com corporations line up for the opportunity to curry their favor—and beseech them for endorsements and advice—these lawyers must avoid even the appearance of financial stake in the matters they are addressing. This may be difficult, given the relatively lean

⁷⁰ Interview with CL014, 1138

salaries they draw, and the private donations and grants on which they rely.

Marc Rotenberg describes the efforts he must make to assure others of his independence:

To the extent that I've had concerns on the ethical front, I think it would probably only be about the receipt of money...I just made a decision that it would not be appropriate in my line of work to be holding any stock...I made a purposeful decision that I wouldn't do any consulting, and believe me the opportunities are extraordinary. I made a purposeful decision not to sit on any boards. A lot of companies have come to me; in fact, some pretty fancy companies said, 'We would love to have your privacy expertise, we would like to put you on a board, like to give you some equity.' I said, 'I appreciate your calling. Sorry, I can't do it.'⁷¹

A few of our subjects spoke of similar difficulties, and draw similar lines to protect their reputations as independent spokespeople. As Charles Nesson puts it, "There's temptation all around. But the whole idea is to advance an idea. The character of the speaker is important. If you compromise the character of the speaker by going over to the dark side, you defeat yourself."⁷²

In sum, the challenges brought by the Internet have provided a handful of lawyers with the opportunity to demonstrate—maybe even recognize—their more traditional roles as educators and independent servants to wider constituencies. They have gone to great lengths to preserve these roles, sometimes perturbing clients, and often forgoing financial rewards. In the

⁷¹ Interview with Marc Rotenberg, 1340

⁷² Interview with Charles Nesson, 893

process, most are notably happy, having the luxury of using their work as a conduit for their own core beliefs and values.

What will happen to these individuals when the oasis dries up (as they predict it will)? Will they be absorbed, like cyberlaw, into the larger profession as regular patent attorneys and torts professors, their transient status as pioneers eclipsed? Or, as Andrew Shapiro guesses, will some go looking for new challenges which will harness their interdisciplinary bent and desire for alignment? Can these be readily found in the legal profession? Critics, and some subjects, question whether or not they presently can. We hope to investigate this further with a larger study of the profession detailed in Section Five (Proposal One).

Although the novelty of our subjects' work on the Internet may be fleeting, the results could have a lasting impact on lives of hundreds of millions of people. As governments and commercial interests begin to turn their attention to the medium, we find ourselves at a critical juncture. As the cyberlawyers tell it, the moment is ripe for both untold benefits and unprecedented disaster. We detail these possibilities in the next section.

IV. Visions for, and Threats to, the new Medium

A. Recognizing the Potential

Ultimately, our subjects are motivated by their hopes for the future of the Internet, and their desire to insure that certain values are imported into the technology and incorporated in the application of law. In this regard, they discuss considerable potential for cyberspace:

1) *As a medium which respects—and possibly enhances—the values underlying legal regimes and democracy.* As lawyers dealing with the medium, our subjects obviously hope that those balances of speech, property, security, and privacy established in the tangible world will be protected successfully on the Internet. Additionally, a few of our subjects see the potential to improve the very function of democracy. “The success of this new technology,” remarks Marc Rotenberg, “should be measured not simply in terms of functionality, and simply in terms of economic growth, but the extent to which it strengthens democratic institutions, empowers individuals, and enables a more just society.”⁷³

2) *As a vehicle for empowering individuals, socially and economically.* The First Amendment/civil liberties lawyers speak at length about the power of the Internet to foster community, provide social support, and give voice to concerns

and opinions of individuals: to level the playing field between the ordinary citizen and traditional power brokers. In addition, the Internet provides new economic opportunities (e.g., jobs, markets to sell wares) for people who might otherwise be geographically isolated from them. One corporate lawyer raised the possibility of “creat[ing] a new global form of just-in-time knowledge assembly line, a new form of corporate entity in which individuals can locate the place in the world where their available time and expertise will be most needed and valued.”⁷⁴

3) *As a new and improved interactive “public commons” for ideas, innovation, and creativity.* Drawing in part on the spirit of the original Internet architects, many of our subjects view an ideal cyberspace as a place of collective and open problem-solving and contribution. One of the classic examples of this ideal is completion of Fermat’s last theorem, a proof which remained unsolved for 350 years, that is until a cooperative band of Internet users helped Andrew Wiles to work through it in the 1990s.⁷⁵ Beyond mathematical puzzles, technologists in the Open Source (or Free Software) Movement are using the commons to develop new Internet software, by posting the programming code and working cooperatively to develop new applications. Many of these new applications,

⁷³ Interview with Marc Rotenberg, 1152

⁷⁴ CL014, 342

⁷⁵ Lessig, Lawrence. *Code and the Commons*. Keynote speech at Fordham Law School. February 9, 1999. According to Lessig, Wiles first mistakenly thought he had solved Fermat’s proof in the 1990s. After he

given out for free, are competing well with commercial software, including the Windows operating system on which most computers run. Looking toward the future, Jonathan Zittrain comments, "I hope to see and help bring about a future where there is a space that people have as much of a stake in contributing to and developing as they do pulling from."⁷⁶

B. Voicing Their Fear

All of these visions are in potential peril; the efforts of our subjects alone stand as a clear testament to the fact. In their view, a number of forces threaten the realization of their hopes, including government/ law enforcement action, nascent private governance bodies, and, most of all, the market forces which drive the current development of the medium.

Government/Law Enforcement

Fear of government constraint emerged as an "early" concern. At the beginning of the 1990s (as detailed in the story of Mike Godwin), law enforcement officials waged a campaign against computer hackers. Critics viewed this as an attempt to suppress free speech. As encryption technologies

put his work on the Internet, others showed him that his results were incorrect and helped him find the solution.

⁷⁶ Interview with Jonathan Zittrain, 2500

became more common later in the decade, the FBI and other agencies lobbied the government to require surveillance-facilitating technologies, including “key escrow” and the Clinton-backed “Clipper Chip.” Again, civil libertarians have successfully led public protest over the potential privacy violations that these implementations may allow.

In addition to law enforcement officials, legislators have posed many perceived dangers to our subjects’ hopes for the Internet. As detailed, out of the mid-1990s emerged legislation—and subsequent court cases—on the censorship of pornography, with powerful First Amendment implications. Beyond the free speech battles, according to intellectual property experts, the Clinton Administration’s Digital Millennium Copyright Act threatens the values underlying the balance of protecting intellectual property.

In light of these events, some subjects believe the government has demonstrated an ability and willingness to squander the possibilities for the medium.

However, in a few years, these challenges—if not dissipated—have been extended to the private sector. In the spirit of the current Administration’s decree of a “hands-off” policy on Internet development, the government recently transferred an important lever, the allocation of domain names, to a private organization.

The First Attempt at Internet Governance: Domain Names and ICANN

Domain names are text representations of Internet Protocol (IP) addresses, numbers which allow users to route to any website. In order to have a “place” on the Internet, any individual or organization must have an IP address, and hence a domain name. Some are natural mnemonics (e.g., www.voter.com), and others trademarks (e.g., www.disney.com), and are therefore in high demand by those trying to secure a large audience. The difference between a memorable domain name and a long string of nonsensical text could be the attention of a substantial percentage of Internet users. Therefore domain names represent access—potentially access made easy or more difficult—and big business to many. Control over their allocation is a powerful lever on the balance of power in the future Internet.

However, until the late 1990s, domain names were registered with the US Commerce Department, and later with a government contracted corporation, Network Solutions, Inc. (NSI), which possessed a state-sanctioned monopoly on the process. As Web use exploded, so did demand for domain names. This sparked a variety of conflicts: among other things, many individual users rushed to buy up the names of large corporation and other mnemonics, attempting to resell them for large profit. As problems abounded, the Commerce Department handed over the responsibility of allocating domain names from NSI to a nonprofit policy board, the International Corporation for Assigned Names and

Numbers (ICANN)⁷⁷. The body's task is a daunting one: in regard to domain name policy, they have been assigned to represent the interests of all Internet users—both the present 300 million and the hundreds of millions who have yet to move online. The challenges are apparent, in the words of Jonathan Zittrain, “How do you measure the consensus of the Internet at large?”⁷⁸ ICANN is the very first attempt at international governance body, and therefore scrutinized as a potential model for the future.

Given the tremendous diversity of stakeholders, however, many problems have arisen. From the very beginning, many viewed ICANN and its original appointed (i.e., unelected) board members with great suspicion, accusing the organization of being undemocratic, and questioning its legitimacy.⁷⁹ Critics accused the board of making important decisions behind closed doors; and of secretly catering to the desires of powerful governmental and corporate interests. One of our subjects, who has worked closely with the organization, confirms some of their fears:

One of ICANN's biggest vulnerabilities is that people see it as closed, not accessible, as operating in secret⁸⁰...Everybody is afraid that if they don't get in at the beginning, that some momentum will go and their voice will be too remote...At least that's what I see coming from the individual crowd that does not belong to a major corporation. The big voices have their conduits and they are very comfortable. It is the little guy that is not sure he has a voice, and

⁷⁷ <<http://www.icann.org>>

⁷⁸ Interview with Jonathan Zittrain, 503

⁷⁹ Clausen, Jeri. “Internet Governance Board Confronts a Hostile Public.” *NY Times*, Nov. 16, 1998

⁸⁰ Interview with CL002, 1461

therefore is terrified he won't be at the right place at the right time.⁸¹

We don't know what the comfortable people are saying because they don't need to express it in these forums. So, I don't know what IBM is saying to the Board. I have a reasonable idea, just because from knowing the business, you know what they'd like to have. So that's not recorded. And, even if you have open meetings, that won't be recorded. So, that's not going to change. They can go directly to established governing bodies to get what they want.⁸²

Much of the recent scrutiny and suspicion has centered around the upcoming election of nine new board members, included to represent the Internet community at large. Critics complain that the process could easily be captured by powerful interest groups, and want to delay the election—scheduled to begin in the late fall of 2000—until new checks are put in place to prevent this possibility.⁸³

Its every action hotly debated, this first attempt at international Internet governance acts as a model battleground for all of the conflicting interests that hope to shape the future Internet. One of those, clearly the most influential and therefore of greatest concern to our subjects, is the collection of market players who have shepherded much of the medium's modern evolution.

⁸¹ *Ibid.*, 921

⁸² *Ibid.*, 981

⁸³ Clausing, Jeri. "Report Criticizes Viability of Internet Oversight Panel." *NYTimes*. March 6, 2000

The Market

Of any force, the market has clearly had the largest impact on the evolution of the Internet and the World Wide Web in the last decade. Along with the vast investment and innovation, commerce is shaping the technical architectures of cyberspace, and the behaviors it will allow. According to our subjects, market forces now pose the greatest threat to the potential of the medium. By encouraging commerce-facilitating architectures, monopolizing and restricting access points, and bringing lawsuits against individuals, market players may be leading the Internet toward the realization of several dystopian ends by:

1) *“Dumbing-down” the medium.* Media corporations and businesses have made great efforts to extend their real-world market dominance to the World Wide Web, offering user-friendly entertainment, shopping, and news. Early cyberspace enthusiasts worry that all of the convenience has left the Internet a more homogenous and less interactive place—a medium which panders to the lowest common denominator. As Jonathan Zittrain puts it, the Internet could become little more than “television with extra features, but television at its heart...entertainment generated from a central source by professional

entertainment generators.” He pleads, “We have [already] got that. I do not hate it, but please don’t do that to the Internet!”⁸⁴

2) *Constraining speech and the free flow of information.* A few of our subjects argue that market forces are working against the open exchange that characterized the earlier Net. Many companies are bringing suit against ordinary consumers for critical remarks posted online. According to Ann Beeson, these so-called “SLAPP suits” (short for Strategic Litigation Against Public Participation⁸⁵) are designed for one purpose only: “The company is suing to shut them up basically, so that they will go away and agree not to say anything else critical⁸⁶...[T]hey know that these people don’t have any money [to go to court]; they are just these regular people who are saying things online.”⁸⁷ She adds, “There is a huge civil liberties problem with that.”⁸⁸

In addition to these lawsuits, the emergence of content filtering technologies also poses a threat to speech. Marketed as a means for blocking children’s access to pornographic and racist materials, filtering software packages have become popular, both in private homes and—to the chagrin of civil libertarians—public facilities (e.g., libraries). Spurred on by the perceived efficacy of these devices, technologists at the W3C created the Platform Independent Content Selection

⁸⁴ Interview with Jonathan Zittrain, 2429

⁸⁵ <<http://www.gatt.org/slapp.html>>

⁸⁶ Interview with Ann Beeson, 1100

⁸⁷ *Ibid.*, 1097

⁸⁸ *Ibid.*, 1102

(PICS), designed as a Internet-wide protocol for rating and selectively filtering websites. Both PICS and consumer packages have raised the hackles of some of our subjects. They argue that attempts to block hate/adult speech are unrealistic from a technical perspective, often filtering out many valuable resources (e.g., sex education, valuable commentary on racism, etc.); for example, as Ann Beeson tells us, “filters in almost every case [block out] a lot of the sites that seek to expose the hate groups, because of course they can’t tell the difference.”⁸⁹ Moreover, attempts to filter websites according to content, as proposed by PICS, would inevitably block those that have not had the time and/or money to secure some sort of rating.

Even if these sites could discriminate content perfectly, they may still do a disservice to free exchange. In his recent book, *The Control Revolution*, Andrew Shapiro warns that instead of protecting speech, filtration would offer perfect “protection from speech,”⁹⁰ allowing citizens to completely ignore everything they would rather not hear.

3) *Creating a “pay-per-view universe.”* As discussed, many technologies in development could allow property owners near perfect control of their works. Some of our subjects fear that this software could eventually restrict the use of intellectual property beyond the intended balance struck by traditional copyright

⁸⁹ *Ibid.*, 1279

⁹⁰ Shapiro, Andrew. *The Control Revolution* (PublicAffairs, NY. 1999) at Ch.11

law—dissolving real world flexibility like fair use, and turning public materials into private property. Already, mechanisms, such as “trusted systems” and “digital envelopes” could encode specific copyright restrictions onto goods and a personal computer’s ability to view/use them⁹¹; they could be used to identify paying customers and restrict others from accessing material, tracking—and charging for—every use of a product. One of our subjects, an intellectual property expert, believes this could have dangerous implications:

Now the technology means you can track everything, track every use, charge for every use. So why would people ever actually sell a book? They will just license it, and every time you wanted to read it, you pay a fee...There’s a concern that people will take public domain works, or works that are not really protected by copyright...throw them in these digital envelopes, and basically make it impossible to get the work...they call it the ‘paid-per-view universe.’⁹²

This notion that everything on the Internet—including public experience—could be proprietized and controlled is discussed by Jeremy Rifkin in his book, *The Age of Access*.⁹³ He asserts that, in the future, cultural phenomena (e.g., “rituals, the arts, festivals, social movements, spiritual and fraternal activity, and civic engagement”⁹⁴) will become the dominant financial asset, and access to them carefully controlled for profit. Although most of our subjects are not as certain that this will actually happen, the possibility remains a concern, and they remain vigilant.

⁹¹ For a brief overview, see: “Digital rights and wrongs.” *The Economist*. July 17, 1999

⁹² Interview with CL016, 384

⁹³ Rifkin, Jeremy. *Age of Access* (Penguin Putnam, NY. 2000)

4) *Compromising privacy*. In addition to the information collected by advertisers, the technical mechanisms designed to facilitate commerce could strip users of anonymity (a hallmark of the early Internet) and privacy. To find an example, one needs to look no further than the systems designed to protect property. According to Pam Samuelson, professor at Boalt Law School, devices like trusted systems, “allow [publishers] to monitor what someone is reading, how long they are reading, what they read next, and what they are willing to pay for the information.”⁹⁵

5) *Proprietizing access points and limiting choice*. “The hardest fact to grasp about the Internet,” writes James Gleick, “[is that it] isn't a thing; it isn't an entity; it isn't an organization. No one owns it; no one runs it.”⁹⁶ Although correct, Gleick’s statement ignores an important idea: one need not “own” or “run” the entire Internet in order to control it. By simply owning or running access to it, one can accomplish just that. There are a number of entry points to the Internet, that have changed along with the medium, and that offer new opportunities to proprietize access.

In fact, many market players have tried to do so in a number of ways, two of which are particularly salient. The first—and unsuccessful—was Microsoft’s

⁹⁴ *Ibid.*, pg. 7

⁹⁵ Interview with Pamela Samuelson, 190

attempt to restrict the market for web browsers, the most important software portals to the Internet. Recently split up by District Court Judge Penfield Jackson, Microsoft, was found guilty of limiting consumer choice by technically binding its own web browser, Internet Explorer, to the Windows operating system. Given Windows 85% share in the operating system market, Microsoft could have extended its monopoly into web browsers by “tying” the two products.

The second—and less publicized—attempt to control access to the Net has been through the cable industry. As the Internet has become a vehicle for more complex audio and visual material, broadband cable lines have arisen as a faster (than normal phone lines) means for providing Internet service. However, unlike the telephony business which is regulated by the government, the owners of the cable lines in any given region can limit users to owned or affiliated Internet Service Providers. Some have already demonstrated a willingness to do so. In Massachusetts, the towns of Cambridge, Somerville, Quincy, and North Andover are currently suing AT&T for allegedly blocking their ability to use ISP’s not associated with the company.⁹⁷

As these conflicts arise, corporations like AT&T and AOL/Time Warner, competing with one another, have waged campaigns to buy broadband cable lines across the country. With its recent purchase of MediaOne Group, AT&T,

⁹⁶ James Gleick. “I Have Seen the Future.” *NYTimes Magazine*. 1994; seen in Rifkin, 2000

⁹⁷ Kennedy, Dan. Net Loss. *The Boston Phoenix*. January 6-13, 2000

even after selling some holdings to comply with FCC regulations, may own a share of up to thirty-percent of the nation's cable lines, its wires connecting approximately 16 million users.⁹⁸ AOL, with its acquisition of Time-Warner, now controls this cable access to an additional 12.7 million users.⁹⁹

Demonstrating the potential dangers related to broadband cable ownership, AOL/Time-Warner recently “black-out” ABC from its cable systems after failed contractual negotiations between the two companies. This may be a harbinger for the Internet as well. A *New York Times* editorial called the move “an alarming glimpse of the possible shape of the future of telecommunications,” further commenting:

The threat is real. Cable operators already control access to the Internet, forcing customers to use the operators' choice of Internet service provider...Whatever the merits of fierce bargaining among giant corporations, the public interest in broad access to information has been dealt a blow by this blackout of a top-rated news and entertainment network on television. The combatants have to recognize that there is a public service component to what they do, and that there will be limits to public and political patience with blockades on the information highway.¹⁰⁰

The black-out of ABC—which included its news programs—demonstrates the ability of cable line owners to limit citizens' choices for accessing information. If Internet access providers can block our ability to view a major network media

⁹⁸ Labaton, Stephen. “AT&T Clears Step in Bid to Purchase a Cable TV Giant.” *NYTimes*. May 26, 2000

⁹⁹ Goodman, Peter. Stern, Christopher. “FCC Clears Purchase of MediaOne By AT&T.” *Washington Post*. June 6, 2000

¹⁰⁰ “The Blackout Battle.” Op-ed in *NYTimes*, May 2, 2000

station, it is not difficult to imagine what they can do to all of the individual users who post their own work and opinions on the Net.

The problem becomes much more complicated when one realizes that access providers, search engines, web browser companies do not need to block out information sources completely to limit our access. They can simply make it less convenient to find them; for example, web browsers come equipped with “channels,” providing instant access to news, entertainment, and commerce resources associated with the browser’s company. Search engines can prioritize their lists of findings on the basis of paid relationships, making it harder to find other resources. Certainly, most of the information made readily available pre-Internet, via television, newspapers, and radio, was grounded in these market relationships. However, as one subject bemoans, “[T]here was a chance for the Internet to be different.”¹⁰¹

¹⁰¹ Interview with CL015, 1547