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Protecting Software and Information on the Internet

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Symposium

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Omar Khudari, and George S. Takach

Table of Contents

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Ronald Cass, Steve Bauer, Pamela Samuelson, Maureen O'Rourke, Omar Khudari, and George S. Takach

Dean Ronald Cass:[1]

1. Welcome. My name is Ron Cass. I am Dean of the Law School here at Boston University. This is part of an ongoing series of symposia on the Internet and Internet law. The program has been put together by Michael Baram, of our Center for Law and Technology, and Steve Bauer, of the law firm Testa, Hurwitz & Thibeault, which has contributed generously to the series and made it possible to line up a number of speakers. I am going to turn over the program now, but I wanted to take this opportunity to thank both Mr. Baram and Mr. Bauer for all that they have done.

Steve Bauer:[2]

2. I will turn the panel over to Pam Samuelson, our featured speaker today. Pam Samuelson is a professor at the University of Pittsburgh Law School. Last year she was a visiting professor at Cornell Law School, and as of July 1, 1996 she will be moving over to the University of California at Berkeley.

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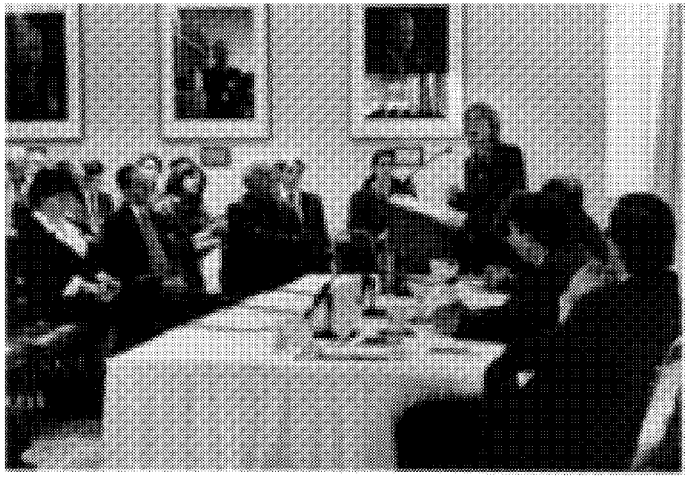
1 Ronald Cass is Dean of the Boston University School of Law.

2 Steven M. Bauer, Esq. is the Co-Chair of the Patent and Intellectual Property Group at the law firm of Testa, Hurwitz & Thibeault.

Pamela Samuelson:[3]



Pamela Samuelson

3. Boston University School of Law has produced such a rich body of scholarship on intellectual property issues that it is an honor to be here to further discourse on this subject. This is actually the fourteenth year of my life in which I have been concerned with the legal protection of software and other kinds of digital information products, and several times over the course of the last 14 years, I found myself tired of writing about software. I thought I had said everything that there was to say about this subject, and I swore several times to stop writing about it because I just felt like I had done what I could. The problem for me has been that I keep finding new permutations of the issues that both excite my intellectual curiosity and that also arouse in me a very strong set of public policy concerns. Those are the things that really keep driving me back to what I think is one of the richest fields of law right now, and so today I break my word again by being here to talk with you about these issues.

4. As I think back over those 14 years, one of the things that stands out most in my mind is how personally satisfying it has been to meet some of the leading computer programmers who design the really exciting programs and other technologies that give rise to this field of law. One of the things that motivates me as I think about how the law should adapt, is figuring out what will help these really creative people to keep doing what they are doing. I try to talk to people in the

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3 Pamela Samuelson is a Professor at the University of California at Berkeley, School of Law.

technical community and understand their perspective on the legal issues, because it seems to me that is what copyright and what intellectual property laws are supposed to be doing -- spurring just exactly the kind of creativity that you see so much in this software area. I think that the law needs to be responsive and make sense to the technical community, and that has been one of the things that I have worked on.

5. Back in 1989 I organized a debate for a user interface conference. It was a plenary session debate that featured Jack Brown, the principal lawyer for Apple Computer in the then ongoing *Apple v. Microsoft* look-and-feel[4] lawsuit,[5] and Tom Hemnes, of Foley, Hoag & Elliot here in Boston, who represented one of the defendants in the *Lotus* look-and-feel lawsuits.[6] They each had the same amount of time to pitch their views about why either strong copyright protection or more minimal copyright protection for user interfaces should be available. The most creative user interface designers in the world attended the conference, making it the leading interface design conference in the country.

6. My husband and I decided it would be interesting to survey people who were in the audience, all of whom had heard exactly the same content, about their reaction to the legal issues.[7] We distributed a survey form and of 1000 people, nearly 700 filled in the form. Now, as we were thinking about counting the results to find out what a representative sampling of the field might think about the legal protection issues, I found myself thinking that although I interpreted copyright law to require relatively minimal protections for user interfaces and programs, I ought to re-examine my views if many people in this user interface design community thought that copyright protection for command hierarchies and for look-and-feel was appropriate.

7. We actually did count all the ballots, and discovered that although there was overwhelming support for copyright protection for source and object code, there was very strong opposition to copyright protection for look-and-feel, command hierarchies, and a number of other elements of user interfaces. It seems to me that while courts in look-and-feel lawsuits probably should not consider this survey, law should make sense to people in the field. Therefore if the people in the field are not

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4 Look-and-feel is used to describe what a piece of software looks like and how it feels to the person using the software.

5 Apple Computer, Inc. v. Microsoft Corp., 709 F. Supp. 925 (N.D. Cal. 1989), *aff'd*, 35 F.3d 1435 (9th Cir. 1994), *cert. denied*, 115 S. Ct. 1176 (1995).

6 Lotus Dev. Corp. v. Paperback Software Int'l, 740 F. Supp. 37 (D. Mass. 1990). *But see* Lotus Dev. Corp. v. Borland Int'l, Inc., 799 F. Supp. 203 (D. Mass. 1992), *rev'd*, 49 F.3d 807 (1st Cir. 1995), *aff'd by an equally divided court*, 116 S. Ct. 804 (1996).

7 *See generally* Pamela Samuelson & Robert Glushko, *Comparing the Views of Lawyers and User Interface Designers on the Software Copyright "Look and Feel" Lawsuits*, 30 JURIMETRICS J. 121 (1989) (providing results of the survey).

thinking that they need this additional protection, then maybe we should at least think about this as we carry out interpretations of rules with respect to programs.

8. As things worked out, Apple lost its look-and-feel lawsuit[8] and eventually Lotus lost its look-and-feel lawsuit also,[9] so that the law now corresponds more with what I think the user interface design community thought that the law should be at the time of this survey. There is then some convergence between the predominant view of the technical community and that of the courts. One of the main developments in the law of computer software protection in the last five years has been more effort on the part of judges to really think about software in technically sensible terms and to stop analogizing them simplistically to plots of novels or notes for a piece of music.

9. The Second Circuit's criticism of *Whelan v. Jaslow*[10] as based on an outmoded understanding of computer science was more of a death knell for that decision's standing as precedent than all the legal criticism that had been leveled at its test for copyright infringement in software cases.[11] Most cases after *Altai* follow the new test announced by the Second Circuit and criticize *Whelan* as being based on a misunderstanding of the technology.[12] There has been much more of an attempt in the opinions to understand what qualifies as a nonliteral element of a computer program deserving copyright protection.[13] I think that is a really good development.

10. I just recently read an article, which I really recommend to you, by Professor Marci Hamilton.[14] She and a computer science graduate student have written an article advocating the greater use of technically sound understanding of

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8 *See Apple Computer*, 709 F. Supp. at 925.

9 *See Lotus Dev. Corp.*, 116 S. Ct. at 804.

10 *See* Computer Assocs. Int'l, Inc. v. Altai, Inc., 982 F.2d 693, 702 (2d Cir. 1992), *aff'd*, 61 F.3d 6 (2d Cir. 1995) (criticizing Whelan Assocs. v. Jaslow Dental Lab., Inc., 797 F.2d 1222 (3d Cir. 1986), *cert. denied*, 479 U.S. 1031 (1987) for using simplistic analysis to separate the single protectable idea of a program for the protection and calling all else protectable expression).

11 *See* Raymond T. Nimmer & Patricia Ann Krauthaus, *Software Copyright: Sliding Scales and Abstracted Expression*, 32 HOUS. L. REV. 317, 358 (1995) (citing sources).

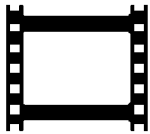
12 *See* Engineering Dynamics, Inc. v. Structural Software, Inc., 26 F.3d 1335, 1343 (5th Cir. 1994) (endowing the *Altai* abstraction-filtration-comparison approach for determining the similarity of computer programs); Gates Rubber Co. v. Bando Chem. Indus., 9 F.3d 823, 841 (10th Cir. 1993) (same); CMAX/ Cleveland, Inc. v. UCR, Inc., 804 F. Supp. 337, 352 (M.D. Ga. 1992) (arguing that the *Whelan* test "is inadequate to address the complexity of computer programs.").

13 *See Engineering Dynamics*, 26 F.3d at 1343; *Gates Rubber Co.*, 9 F.3d at 841; *CMAX/ Cleveland, Inc.*, 804 F. Supp. at 352.

14 Marci Hamilton & Ted Sabety, *Computer Science Concepts in Copyright Cases: The Faith to Coherent Law*, 10 HARV. J.L. & TECH. (forthcoming Feb. 1997).

computer programs as the basis for doctrinal analyses.[15] The article explains why it was technically sound to view the Lotus command hierarchy as an integral part of a computer macrolanguage and why macrolanguages, from the standpoint of the technical community, from the standpoint of copyright doctrine, and from the standpoint of policy, should not be protected by copyright law no matter how much creativity it may have required to develop that macrolanguage in the first place.[16] She and her co-author go on to explain why algorithms should be treated in much the same way.[17] They also talk about data structures.[18]

11. There are often constraints in the design of a program on what data structure one will use because the algorithm, in part, may help determine what is an appropriate data structure for the design of a computer program.[19] Regardless of whether or not you agree with the substance of analysis in this particular article, anyone who is trying to refute what these people say is going to have to offer a technically sound alternative analysis. We have gone past the point of simply saying the law should protect the non-literal elements of computer programs because they are like plots of novels.[20] I think that is a passé element of a computer program legal analysis.



12. A second development in the last five years has been an increasing sensitivity on the part of courts in copyright cases to ensure that copyright law is not going to be used as a surrogate or substitute for patent protection. Courts want to make sure that computer programs are not going to get patent-like protection through copyright law. That was most evident in the two appellate court opinions,

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15 *See id.*

16 *See id.*

17 *See id.*

18 *See id.*

19 *See id.*

20 *See Whelan Assocs.*, 97 F.2d at 1234; *see also* SAS Inst. v. S & H Computer Sys., Inc., 605 F. Supp 816, 830 (M.D. Tenn. 1985) (asserting a factual similarity between computer software copying and a case of novel copying).

Sega Enterprises v. Accolade[21] and *Atari Games v. Nintendo,*[22] both of which involved claims of copyright infringement arising from the copying of a program code in order to access information that was necessary to create programs that would inter-operate with an existing computer program. We see this theme cropping up in a number of other decisions as well, one of which was Judge Boudin's concurrence in the *Lotus v. Borland* [23] case about a year ago.

13. The *Atari Games* case is actually the decision that is most explicit about a linkage between the things that are unprotectable under section 102(b) of the copyright statute, and things that may be patented about computer programs.[24] The opinion asserts that what copyright protects in a program is expression, and what patent protects is the process or method of operation that may be embodied in a program.[25] Let me just repeat for those of you who have not memorized it, what section 102(b) of the copyright statute says is "[i]n no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work."[26] I have always read this particular provision as, in a sense, two provisions. One of the things that I read this particular provision to make unprotectable by copyright law is composed of more abstract elements of works, such as ideas, concepts, principles, and discoveries. I read the other class of things that are excluded -- procedures, processes, systems and methods of operation -- as more complicated and multiple-part things that copyright also excludes from the scope of protection.

14. I think all of the things in this first category of abstract ideas are unprotectable under both copyright and patent law. I believe that the second category is unprotectable by copyright law in part because Congress intended for many of those processes, procedures, systems, and methods of operation to be protectable, if at all, by the patent system, and not by the copyright system. In my view, it is appropriate for courts to relegate the protection of certain aspects of computer programs to the patent system and to withhold copyright protection from them. The roots of this exclusivity theory of patent and copyright actually trace back

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21 977 F.2d 1510 (9th Cir. 1992).

22 975 F.2d 832 (Fed. Cir. 1992).

23 49 F.3d 807, 819 (1st Cir. 1995) (Boudin, C.J., concurring) ("Granting protection, in other words, can have some consequence of patent protection in limiting other people's ability to perform a task in the most efficient manner.").

24 *See Atari Games Corp.*, 975 F.2d at 839.

25 *See id.*

26 17 U.S.C. § 102(b) (1994).

to the 1879 decision of *Baker v. Selden*,[27] and anyone who has taken a copyright class knows this particular case. This was a case in which the Supreme Court had to make a decision about Selden, who, after attempting unsuccessfully to patent a book-keeping system, brought a copyright infringement action against Baker, who wrote a book about the same system and included sample ledger sheets in his pamphlet.[28] One of the things the Court said was that it would be a surprise and a fraud" for someone to get patent-like protection for something that is patentable but has not, in fact, received patent protection.[29] In that opinion, there is language that many people in intellectual property law interpret as saying that there is a domain that copyright regulates and a domain that patent regulates, and never the twain shall meet.[30]

15. That particular exclusivity theory was rejected in part in a 1954 Supreme Court decision called *Mazer v. Stein*.[31] This was a case in which somebody who had designed a Balinese dancer to serve as the base of a lamp had tried to copyright the little statuette with the Copyright Office. The man who had exactly copied the statuette argued that this was really an ornamental design for an article of manufacture and should be regulated, if at all, by design patent law, and not through copyright law.[32] They never intended to sell these statuettes as works of art. Instead they intended to mass market the articles of manufacture under design patent law.[33]

16. In that decision, the Supreme Court said in one quick statement that [n]either the Copyright Statute nor any other says that because a thing is patentable it may not be copyrighted."[34] The rest of the holding, that a statuette is nonetheless a work of art,[35] seems to me unexceptionable. That particular statement by the Supreme Court has been construed variously. There are some people who say it is dicta and should be ignored.[36] Other people say it only pertains

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27 101 U.S. 99 (1879).

28 *See id.* at 100-01.

29 *See id.* at 102.

30 *See* Lotus Dev. Corp. v. Paperback Software Int'l, 740 F. Supp. 37, 72 (D. Mass. 1990).

31 347 U.S. 201, 217 (1954).

32 *See id.* at 215-16.

33 *See id.* at 218.

34 *Id.* at 217.

35 *See id.* at 217-18.

36 *See* BENJAMIN KAPLAN, AN UNHURRIED VIEW OF COPYRIGHT 55 (1968); *see also* Steven P. Handler, Comment, *Copyright Protection for Mass-Produced, Commercial Products: A Review of the*

to a place where design patent law and copyright law overlap because an ornamental design of an article of manufacture can be protected by design patent law, but if it separately qualifies as a work of art, then it can also get copyright protection.[37] If there was a repudiation of this kind of exclusivity theory, it was only where Congress had explicitly decided that there should be some overlap on account of the ornamentality requirement in the design patent statute.[38]

17. Other people say that this particular provision, or this particular statement out of *Mazer v. Stein* totally repudiates the exclusivity theory, and that from now on, it is totally irrelevant whether something can or cannot be patented.[39] This subject is still very much open to debate. From having closely read the briefs filed in the *Lotus v. Borland* case, I know that Gary Reback made the patent/-copyright exclusivity theory the centerpiece of his argument to the Supreme Court.[40] He thought he was going to win this one hands down, and had, in fact, found some patents that companies like IBM had obtained for command hierarchies of computer programs -- the kind that Lotus was seeking to protect through copyright law in the *Lotus v. Borland* case.[41] Mr. Reback argued that the patents that had been obtained for these command hierarchies showed that this kind of stuff is the subject matter of patents and that it should not be protectable by copyright law.[42]

18. Now Judge Keeton rejected that argument at the district court level with a summary statement that *Mazer v. Stein* essentially throws exclusivity theory out the window.[43] Judge Stahl's opinion for the majority that overturned Judge Keeton's decision in this case says nothing at all about the patent/copyright relationship.[44] There is some intriguing, if somewhat nebulous language in the Boudin concurrence

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Developments Following Mazer v. Stein, 38 U. CHI. L. REV. 807, 823 (1971); Note, *Protection for the Artistic Aspects of Articles of Utility*, 72 HARV. L. REV. 1520, 1526 (1959).

37 *See In re* Yardley, 493 F.2d 1389, 1393 (C.C.P.A. 1974); *see also* Mark A. LoBello, *The Dichotomy Between Artistic Expression and Industrial Design: To Protect or Not to Protect*, 13 WHITTIER L. REV. 107, 110 (1992).

38 *See Yardley*, 493 F.2d at 1393.

39 *See* Glynn S. Lunney, Jr., *Essay: Lotus v. Borland: Copyright and Computer Programs*, 70 TUL. L. REV. 2397, 2398 (1996) (noting that the language of the *Mazer v. Stein* opinion appeared to repudiate a copyright/patent dichotomy).

40 Brief for Respondent at 22, Lotus Dev. Corp. v. Borland Int'l, Inc., 116 S. Ct. 804 (1996) (No. 94-2003).

41 *See id.* at 44.

42 *See id.*

43 *See* Lotus Dev. Corp. v. Borland Int'l, Inc., 831 F. Supp. 223, 232 (D. Mass. 1993).

44 Lotus Dev. Corp. v. Borland Int'l, Inc., 49 F.3d 807, 812-19 (1st Cir. 1995).

to this particular decision,[45] but none of the lower courts actually focused on this issue. Mr. Reback thought the Supreme Court would really find this compelling, and he thought he was going to win this one eight-to-zero. As we all know, this did not happen.[46] What we know now is that the issue of the relationship between patents and copyrights, and how both apply to computer programs, is still up in the air, and still the subject of some dispute.[47]

19. There had been a time when I held much of the "never the twain shall meet" theory about the patent/copyright relationship. If an aspect of a computer program could be protected by a patent, I thought that showed that it should not be protected by copyright. In talking with some of my colleagues in the intellectual property field, I discovered that there was no unanimous opinion on this subject. Rather, there is a considerable difference of opinion.[48] I am now of the view that courts should consider, among other factors, whether or not elements of programs are, or could be, patented as part of determining what content to give that exclusionary language of section 102(b) -- namely, that in no case shall copyright protection be available to a procedure, process, system, or method of operation, regardless of how it is embodied in the work.[49]

20. It seems to me that what we are left with, since an equally divided Supreme Court affirmed the *Lotus v. Borland* case without an opinion,[50] is a kind of case-by-case development about what section 102(b) means as to particular computer program elements. If you study the cases relatively closely, you will not find unanimity of opinion, but you will see a growing body of case law that gives content to those exclusions and rejects the theory that Judge Keeton was relying on: that all of the excludable elements of section 102(b) could be collapsed into the abstract idea" notion.[51] It seems to me that since Congress specifically put section 102(b) into the copyright statute, in part because they were concerned that some

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45 *See id.* at 819 (Boudin, C.J., concurring).

46 *See Lotus Dev. Corp.*, 116 S. Ct. at 804 (affirming Court of Appeals decision without opinion).

47 *See id.*

48 *See generally* Pamela Samuelson, *Survey on the Patent/Copyright Interface for Computer Programs*, 17 AIPLA Q.J. 256 (1989) (discussing various views on exclusivity theory); *see also* Mark Paley, *A Model Software Petite Patent Act*, 12 SANTA CLARA COMPUTER & HIGH TECH. L.J. 301 (1996) (proposing additions to the patent laws to protect software).

49 *See* Pamela Samuelson, *Brief Amicus Curaie of Copyright Law Professors in Lotus Development Corp. v. Borland International, Inc.*, 3 J. INTELL. PROP. L. 103, 105 (1995).

50 Lotus Dev. Corp. v. Borland Int'l, Inc., 116 S. Ct. 804 (1996).

51 *See* Computer Assocs. Int'l, Inc. v. Altai, Inc., 982 F.2d 693, 702 (2d Cir. 1992), *aff'd*, 61 F.3d 6 (2d Cir. 1995); Sega Enters. Ltd. v. Accolade, Inc., 977 F.2d 1510 (9th Cir. 1992).

companies might try to get copyright protection for the processes and methods that should be protected by another law,[52] we ought to give content to it, and unfortunately the slow case-by-case way is about the only thing that we are going to see in the future.

21. What I would like to do in the few minutes that I have left is briefly talk about what the Internet does with, or for, software. It seems to me that many of the questions that we have seen coming up in the context of package or license software are still going to come up in the context of Internet distribution of software. From the software developers' standpoint, there are some real advantages to Internet distribution. One advantage is that you can cut the costs of the middlemen. Another advantage is that you can get assent to contractual terms that you might not otherwise get under a shrinkwrap license.[53] The main reason that courts have decided not to enforce shrinkwrap licenses is that there is no agreement by the consumer at the time of purchase to those terms of the license.[54] They usually buy the package, take it home, and then rip the thing open. This action afterwards is simply not part of the bargain.[55]

22. But, if you have a server on the Internet, then you have customers who go to that particular server to download a particular piece of software. The consumer can assent to license terms. Unless you click and agree to the terms of this license, you are not going to be able to download the program. Many of the terms and conditions that are unenforceable in shrinkwraps may become enforceable. This leaves aside the questions of contracts of adhesion and the like, which other people may use to argue against some of the terms of "shrinkwrap licenses,"[56] but it seems to me that it is a really important advantage to companies like Oracle.[57] These

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52 *See* H.R. REP. NO. 1476, at 57 (1976), *reprinted in* 1976 U.S.C.C.A.N. 5659, 5670.

53 A shrinkwrap license "gets its name from the fact that retail software packages are covered in plastic or cellophane 'shrinkwrap,' and some vendors . . . have written licenses that become effective as soon as the customer tears the wrapping from the package." ProCD, Inc. v. Zeidenberg, 86 F.3d 1147, 1149 (7th Cir. 1996).

54 *See* ProCD, Inc. v. Zeidenberg, 908 F. Supp. 640, 654 (W.D. Wis. 1996), *rev'd*, 86 F.3d 1147, 1149 (7th Cir. 1996); Step-Saver Data Sys., Inc. v. Wyse Tech., 939 F.2d 91, 106 (3d Cir. 1991); Arizona Retail Sys., Inc. v. Software Link, Inc., 831 F. Supp. 759 (D. Ariz. 1993); *see also* Mark Lemley, *Intellectual Property and Shrink Wrap Licenses*, 68 S. CAL. L. REV. 1239, 1245 (1995) (noting that the terms of such licenses do not become part of the bargain because consumers believe they are buying, not licensing, the product).

55 *See Step-Saver*, 939 F.2d at 102.

56 *See, e.g.*, Vault Corp. v. Quaid Software Ltd., 655 F. Supp. 750 (E.D. La. 1987), *aff'd*, 847 F.2d 255 (5th Cir. 1988); Foresight Resources Corp. v. Pfortmiller, 719 F. Supp. 1006 (D. Kan. 1989).

57 Oracle Corp. is a developer of database management software. HOOVER'S HANDBOOK OF AMERICAN BUSINESS 100 (Patrick J. Spain & James R. Talbot eds., 1996). Oracle is also credited with building the first relational database. *See Oracle: Enabling the Information Age* (visited Jan. 3,

companies are, in fact, doing Internet distribution of software, in part because they can get the necessary assent that they could not get before.

23. There are many other ways that people will be distributing both software and other kinds of information products in this digital network environment. Some people are probably going to take Esther Dyson's advice, and decide to redefine the nature of their business markets so that things that previously might have been considered aftermarkets become in fact the central market.[58] So you give away, or nearly give away, the software or information product and focus your activities on follow-up activities, updates or other things that you can charge the customers for, in order to get a business relationship going. Some people think you're just not going to be able to control those digital copies on the Net, and for sure they are vulnerable to being copied indiscriminately once they get out on the Net.[59]

24. Content owners who do not want to redefine their businesses in that way but still want to use copyright should be less fearful of the new environment than they sometimes are. In part this is because there have been a number of successful lawsuits against commercial bulletin board system ("BBS") operators that encouraged people to upload and download software products and the like.[60] This is true even though the criminal lawsuit against David LaMacchia for setting up a bulletin board system of that sort at the Massachusetts Institute of Technology was unsuccessful because the wire fraud statute, in the court's view, should not have been used as the surrogate for a copyright criminal provision that Congress had not passed yet.[61] But a criminal provision was proposed that would address *LaMacchia*-like situations,[62] and certainly he could have been civilly sued for what he did. It does seem to me that the law has been showing the ability to adapt to this new environment, and so I am not quite as pessimistic as some about the Internet as a place to market content.

25. One of the really big developments, and one where an enormous amount of energy is focused right now, is the idea of using technological protection to lock-up all

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1997) <http://www.oracle.com/corporate/html/who.html>.

58 *See* Esther Dyson, *Intellectual Value*, WIRED, July 1995, at 138, 183 (suggesting that content providers select, classify, rate, interpret and customize content).

59 *See generally* Teddy C. Kim, Note, *Taming the Electronic Frontier: Software Copyright Protection in the Wake of United States v. LaMacchia*, 80 MINN. L. REV. 1255, 1275 (1996) (arguing that software companies should use technological copy protection to deter small-scale copying and civil actions against large-scale infringers).

60 *See* Sega Enters. Ltd. v. MAPHIA, 857 F. Supp. 679, 686 (N.D. Cal. 1994); Playboy Enters., Inc. v. Frena, 839 F. Supp. 1552, 1556 (M.D. Fla. 1993).

61 *See* United States v. LaMacchia, 871 F. Supp. 535, 544-45 (D. Mass. 1994).

62 *See* S. 1122, 104th Cong. § 2 (1995) (defining financial gain for copyright infringement purposes as the receipt of anything of value).

of the digital content. One of the theories is that you have an encrypted version on a server somewhere, and anyone can download the encrypted version, but she has to pay for the key to unlock the encrypted version. That is your bottleneck to get money. That may, in fact, hold a lot of promise for digital information products whether they are software or anything else. There are, however, at least three potential problems with technological protection. First, once you unlock the copy, you now have a copy that is as easy to copy and redistribute as it was before it was encrypted.[63] Second, it is far from clear that technological protection will succeed in the marketplace, at least as a widespread solution, because technological protection was tried in the software industry before, and it failed in the marketplace. It is not clear that it will succeed this time.[64] Third, whatever one technology can do to protect a work, another technology can do to undo that technological protection. That is why there is so much discussion today about the idea of having a law that will make it illegal to sell or to produce devices or offer services, the primary purpose or effect of which is to circumvent technological protection.[65] I think that a well-crafted, anti-circumvention provision is probably acceptable as a matter of public policy, but I do not see in the Clinton Administration's proposal for an anti-circumvention provision[66] a finely enough crafted provision to warrant our support. It seems to me that we are at the cusp of some important policy decisions here. I just hope we have the wisdom to make good ones.

Steve Bauer:

26. There are three other people on the panel. Maureen O'Rourke is an Associate Professor of Law here at Boston University ("BU"). Before coming to BU she was a licensing expert at IBM, and her research focus now is on the use of private contract law to circumvent or to fix the perceived holes in statutory law such as copyright.

27. Omar Khudari is the President and co-founder of Papyrus Design Group, a Cambridge-based software start-up company. Papyrus is a company that relies heavily on copyright law to protect itself. Recently, Papyrus was able to download a software product off of a European server that was a copyright infringement of its

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63 *See* Pamela Samuelson, *Will the Copyright Office Be Obsolete in the Twenty-First Century?*, 13 CARDOZO ARTS & ENT. L.J. 55, 58 (1994).

64 *See* Ariel B. Taitz, Note, *Removing Road Blocks Along the Information Superhighway: Facilitating the Dissemination of New Technology by Changing the Law Contributory Copyright Infringement*, 64 GEO. WASH. L. REV. 133, 164 (1995).

65 *See* Edward Samuels, *Copyright Concerns on the Information Superhighway*, 1994 ANN. SURV. AM. L., 383, 387 (1994); *see also* H.R. 2441, 104th Cong. § 4 (1995) (prohibiting the importation, manufacture, or distribution of any device, or offer any service to circumvent any system that protects the exclusive rights of a copyright owner).

66 *See* H.R. 2441, 104th Cong. § 1202 (b)(IV)(A)(6) (1995).

product, and preemptively stop its importation into the United States.

28. George Takach is a partner in the Toronto office of McCarthy Tetrault. He is a lawyer specializing in technology law. He also teaches computer law at the Osgood Hall Law School at York University in Toronto, and advises companies on legal and international Internet issues.

Maureen O'Rourke:[67]

29. I want to talk about the intersection of copyright and contract. New technologies are evolving very rapidly. There are two extremes in the schools of thought.[68] One viewpoint is to leave the law alone, and let the market deal with it; let people contract, and things will be fine.[69] The other extreme -- the sky-is-falling viewpoint -- claims that we must make major changes to the copyright law.[70] The truth, as always, is probably somewhere in the middle.

30. The real danger from the Administration's perspective is that the National Information Infrastructure ("NII") will fail to realize its purpose -- to become a valuable disseminator of information -- because people will not be willing to upload any information if they cannot control its disposition in an electronic environment.[71] I think the risk is real to a certain extent. If you look at the World Wide Web today, much of the information available is not of much value. I think what the Administration is concerned about is that the public domain or copyrighted information ultimately available will be of very little value. For example, software beta-test programs, essentially demo copies, will be uploaded, but the marketable

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67 Maureen O'Rourke is an Associate Professor of Law at Boston University School of Law.

68 *See* Pamela Samuelson et al., *A Manifesto Concerning the Legal Protection of Computer Programs*, 94 COLUM. L. REV. 2308, 2420-21 (1994).

69 *See generally* Vance Franklin Brown, *The Incompatibility of Copyright and Computer Software: An Economic Evaluation and a Proposal for a Marketplace Solution*, 66 N.C. L. REV. 977 (1988) (recommending the onus of software protection be placed on the marketplace by encouraging the use of contract law); Thomas Lee Hazen, *Contract Principles as a Guide for Protecting Intellectual Property Rights in Computer Software: The Limits of Copyright Protection, the Evolving Concept of Derivative Works and the Proper Limits of Licensing Arrangements*, 20 U.C. DAVIS L. REV. 105 (1986) (concluding that adequate software protection requires contractual supplement to intellectual property laws).

70 *See generally* Himanshu S. Amin, *The Lack of Protection Afforded Software Under the Current Intellectual Property Laws*, 43 CLEV. ST. L. REV. 19 (1995) (suggesting a form of sui generis intellectual property protection for software is needed to balance the interests of software developers with those of society); Robert A. Arena, *A Proposal for the International Intellectual Property Protection of Computer Software*, 14 U. PA. J. INT'L BUS. L. 213 (1993) (explaining the shortcomings of U.S. copyright law in protecting software and suggesting the adoption of a sui generis computer software protection law).

71 *See* Pamela Samuelson, *The Copyright Grab*, WIRED, Jan. 1996, at 191.

version of the program will not.[72] This concern led to spending a great deal of taxpayer money in an attempt to address some of these issues. The conclusions are reflected in the NII White Paper.[73] I want to talk briefly about one issue the Committee abstained from taking any action on, one change that they have suggested, and one matter on which they just did not comment at all.

31. The Committee abstained from changing liability of online bulletin board operators for any infringement by their subscribers.[74] There have been several cases in which operators of bulletin board systems have been held liable for the infringing uploading activity of their subscribers.[75] The White Paper reflects the perspective that we can leave the law alone and let it develop through the courts.[76] There has been a harm to the copyright owner. The wrongdoer is the system subscriber, but the subscriber is not the deep pocket. Therefore, since the loss must be absorbed by either the bulletin board system operator or the copyright owner, courts allocate the loss to the party in a better position to prevent it, the bulletin board operator.[77]

32. Whether the bulletin board operator is, in fact, in a better position to prevent loss is up for debate. That line of cases has been challenged with the recent *Netcom* decision,[78] in which the court really said, if all you are is a conduit on the Information Superhighway, you have no ability to control the actions or control the information that is flowing over your network, so there is a causation element missing.[79] Therefore bulletin board operators and Internet access providers should not be held liable for the infringement of their subscribers.[80]

33. This is an example of where liability will probably be allocated by

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72 *See id.*

73 INFORMATION INFRASTRUCTURE TASK FORCE, THE REPORT OF THE WORKING GROUP ON INTELLECTUAL PROPERTY RIGHTS: INTELLECTUAL PROPERTY AND THE NATIONAL INFORMATION INFRASTRUCTURE (1995) [hereinafter WHITE PAPER].

74 *See id.* at 117.

75 *See generally* Sega Enters. v. MAPHIA, 857 F. Supp. 679 (N.D. Cal. 1994) (placing liability on a BBS operator who specifically solicited users to upload Sega video games for use by other users); Playboy Enters. v. Frena, 839 F. Supp. 1552 (M.D. Fla. 1993) (holding BBS operator liable for subscribers' uploads of the magazine's copyrighted photographs).

76 *See* WHITE PAPER, *supra* note 73, at 117.

77 *See id.*

78 Religious Tech. Ctr. v. Netcom On-Line Communication Serv., Inc., 907 F. Supp. 1361 (N.D. Cal. 1995).

79 *See id.* at 1369-70.

80 *See id.* at 1371 (holding *Netcom* is not directly liable for subscriber's infringing use). *But see id.* at 1381 (suggesting *Netcom* might be indirectly liable for subscriber's infringing act).

contract. What do online service providers do today? They try to shift the loss occurring from an infringement by subscribers in their licensing agreements.[81] They seek indemnification clauses from their subscribers.[82] Now whether they will be able to be made whole through this route is another matter. But again, this is an area where the government is saying "work it out amongst yourselves."[83] And when they say work it out amongst yourselves, it usually means figure out a way to contract, and deal with the loss that arises, if you do not like the allocations made by the courts.

34. Adding a section to the Copyright Act that targets copyright management information is the proposed change to the copyright law that came out of the NII White Paper.[84] The proposed change would allow civil or criminal liability for the alteration or removal of author identification or copyright information contained on a file.[85] I think it is a misguided provision because the remedies seem disproportionate to the offense, and it is inconsistent with the current approach of section 506 of the Copyright Act.[86]

35. Furthermore, under the proposed change, not only can you be liable for changing the copyright information, you can also be liable for removing the terms and conditions that apply to the software.[87] This is interesting because copyright, traditionally, did not comment on contract law, and this seems to be an attempt to safeguard the terms and conditions you put on your software by making it a copyright offense to remove them.

36. An area that the Committee did not address at all is the protection of online databases where, again, copyright hits the contract barrier. After the *Feist* case,[88] it became clear that it would be very difficult for a database provider to protect the actual information in its database.[89] Database providers respond by contracting around the copyright law, and trying to create private copyright through

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81 *See id.* at 1375.

82 *See id.* at 1376.

83 *See id.* at 1373 n.19.

84 *See* WHITE PAPER, *supra* note 73, at 235.

85 *See* H.R. 2441, 104th Cong. § 1202(b)(I)-1202(b)(ii) (1995).

86 17 U.S.C. § 506 (1994) (providing penalties for removing notice of copyright or attribution).

87 *See* H.R. 2441, 104th Cong. § 1202(b)(I)-1202(b)(ii) (1995).

88 Feist Publications, Inc. v. Rural Tel. Serv. Co., 499 U.S. 340 (1991) (holding that mere alphabetical listing of names, addresses, and phone numbers was not protected by copyright).

89 *See* John F. Hayden, Note, *Copyright Protection of Computer Databases After Feist*, 5 HARV. J.L. & TECH. 215, 219 (1991).

a contractual agreement. This requires licensing the database and treating the information as if it were copyrighted, when, in fact, it is not. A recent Wisconsin case[90] rejects this alternative because one should not be able to essentially create one's own copyright system by private contract.[91]

37. Respectfully, I disagree with this Wisconsin decision. I look at copyright, not as a set of mandatory rules, but more as a set of default rules that people are free to contract around. However, there should be limits to this. The underlying theory of copyright is that it is a grant of exclusive rights in an attempt to encourage creativity to benefit the public.[92] This is a limited monopoly.[93] Contracts hit the copyright barrier when they are foisted off on you in an exercise of market power. I do not buy the idea that all shrinkwraps are unenforceable. I do not buy the idea that all electronic contracts are unenforceable as contracts of adhesion. I think we need to make a deeper market analysis.

38. Even if you have a standard form contract, if you have a competitive market, the standard terms may reflect what the parties would have bargained for had an actual face-to-face negotiation taken place. There seems little reason then to adopt a general rule that rearranges rights even in the context of standard forms. However, we might want to take a closer look at the contractual terms when the near-monopoly power of the seller allows it to force terms on the buyer that limit the rights of the buyer that the buyer otherwise would have had under copyright law. This is not to suggest, however, that the inquiry would be simple. It *is* to suggest, however, as Ms. Samuelson said, that we are on the cusp of these issues. Therefore I do not think we should apply ourselves to working major changes in the copyright law, because once you make the change, it is going to be very hard to undo it. Technology is just changing too fast for the law to effectively keep pace with it. I think we would spend our time more profitably on the analysis of where we think the copyright-contract boundary lies. We need to distinguish the mandatory rules in copyright from the default ones that people should be free to contract around.

Omar Khudari:[94]

39. I am the only non-lawyer participating in this session. All the lawyers will have to excuse me if I get it totally wrong and trample on the legal concepts. We

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90 *See* ProCD, Inc. v. Zeidenberg, 908 F. Supp. 640, 658 (W.D. Wis.), *rev'd* , 86 F.3d 1447 (7th Cir. 1996). This session of the Internet Law Symposium was held prior to the Seventh Circuit reversal of the Wisconsin decision.

91 *See id.* at 658.

92 *See* MELVILLE B. NIMMER & DAVID NIMMER, NIMMER ON COPYRIGHT § 1.03[A] (1996) (summarizing the purpose of copyright).

93 *See id.* § 1.05[D] (explaining the limits on the monopoly granted by copyright).

94 Omar Khudari is the President of the Papyrus Design Group, Inc.

had a discussion upstairs regarding the reason why copyright exists in the first place and the purpose behind it. Ms. Samuelson explained that the main purpose is to benefit the public by making information available to them.[95] The idea is that the government gives a little bit of exclusivity -- a little bit of right to the author to encourage the author to put their work out there -- and by doing so, the public has access to a wider range of information.[96] I started to feel extremely guilty that I had been exploiting these copyright laws for my own benefit. For example, in relation to the case that Mr. Bauer mentioned where we sued an Italian company for copyrighting our game, I thought that maybe copyright should not even be applied to games, because, after all, the public needs the information and the authors do it just for fun.

40. Then Mr. Takach explained that there are other countries, like France, that have different ideas about the purpose of copyright. An alternative theory is that it is the right of the author that is being protected, not the right of the public.[97] That made me feel much better about what I was doing. I was interpreting copyright from the French point of view. That is how copyright is actually applied by the downtrodden authors and the downtrodden multinationals that are exploiting the author's work.

41. If you really do subscribe to the idea that it is the public interest that is most important, then forget about an encryption system that enables companies to charge for every single use of a particular paragraph or series of three words that is cut-and-pasted from a newsletter and put into an e-mail, or other such regulatory systems.

42. If you subscribe to the French point of view, then an encryption system is not such a bad idea. I do not think that copy protection will fail just because the market rejected it once. The market rejected copy protection for software because it was inconvenient and it prevented the user from doing things that the user needed to do. The user needed to be able to make back-up copies because computers crashed all the time and data got lost. The user also hated having to look up word number 10 on page 14 of the manual to answer the copyright key. In the game business, we had code wheels where you could line things up and unlock your legal copy of the software.

43. If there was some automatic system where everybody knew that you were paying fractions of a penny per word taken from a newsletter, and that if you cut-and-paste it into your e-mail that it would automatically bill to your credit card, it would not be a matter of inconvenience. The marketplace still might reject it

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95 *See* NIMMER & NIMMER, *supra* note 92, § 1.03[A] (stating the purpose of copyright is to secure benefits to the public).

96 *See id.* (explaining copyright monopoly is a necessary incentive to creative activity so that the public can benefit).

97 *See id.* § 8D.01[A] (outlining moral rights theory).

because people do not like paying per use. I think the cable industry has figured out that people do not mind paying a monthly fee but they really hate to pay per use.

44. Even if you implemented an encryption system I think you would have a similar state of affairs as you have right now on the Internet, presuming, of course, that you could opt out of the system. If it were optional not to encrypt information and software, and charge people to use it, and it were obvious to the browser, or to the reader, what kind of information they were reading -- free public domain information or protected information carrying a charge by the word -- then the situation would be the same. Nobody would put up information for which you had to pay, except for the expensive business databases and law that are already working very well on private data networks and not the Internet. The only information available for public use would be the free information because people just would not use it.

45. One other thought about patent versus copyright: I do not think that patent law should apply to software at all. I am in a small, vocal minority of people that believe that copyright should be strengthened to apply to things that are now patentable.[98] Speaking from the point of view of an engineer rather than a businessperson, invention moves so quickly in software that the idea of patents does not apply the way it has to other things. There are so many things that are patentable in software that are easily reproducible by an engineer. As soon as you see that it has been done, or it can be done, you can do it again yourself, implemented in perhaps a different way. I think that such implementation should be encouraged and that it should be legal. I do not think it should be legal to disassemble somebody's code, see how they actually implemented it, and then copy their code and use the expression of their idea. As a company we live in fear of what patents might arise that apply to creations we invented independently.

George Takach:[99]

46. I was asked to bring the international perspective. The international scope of all legal work is more predominant than it was years ago. The Internet, which I sometimes view as the International Net, collapses and eliminates geography. There was a time when you could talk about copyright or even the patent system in a national context, but not now. Let me give you a couple of examples.

47. I am working with some hospitals in Toronto that are very heavily into telemedicine projects. They see themselves able to compete in foreign markets, the Middle East, Africa, and perhaps in the United States, with various types of new

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98 *See* Arthur R. Miller, *Copyright Protection for Computer Programs, Databases, and Computer Generated Works: Is Anything New Since CONTU?*, 106 HARV. L. REV. 977, 985-86 (1993) (supporting expansion of copyright law for computer programs, but discussing criticisms that this would lead to patent-like protection without meeting heightened patent law requirements).

99 George S. Takach is a Partner at the law firm of McCarthy Tetrault.

computer-based, as well as technical, surgery-type vehicles because of the lower Canadian dollar. If you break a leg skiing in Colorado, and somebody's operating on you with little computer-driven laparoscopy devices, whether you manipulate the computer in Denver, Toronto, or Boston, will eventually become immaterial.[100] You collapse and eliminate geography. What are some of the legal issues with that kind of collapse? Does the Toronto doctor have to be licensed in Colorado? Where is the operation actually taking place? Do you need liability insurance in Colorado for that sort of activity, and what if there is a power failure? Does it really matter if you are distant from the patient or not?

48. In the liability area, somebody puts forth a libelous or defamatory statement on a server outside of your jurisdiction, but of course people within your jurisdiction can call it up and pull it down. Practically speaking, how do you bring some sort of legal recourse to combat that libel or put an end to it?

49. In the intellectual property field, the border used to be a very good place to fight the battle. You would stop infringing material from coming in whether or not it was libelous, or if it was a copyright infringing question, you would stop it at the border. Well the Net, for the first time in a copyright context, eliminates the border. Historically, Canada, France, and other European countries had rules vis-à-vis the broadcast and radio spectrums.[101] Broadcasters and radio stations would have to play a certain amount of Canadian content.[102] People like Bryan Adams were the beneficiaries of that for many, many years.

50. How do you implement a Canadian content rule in the land of the Net where scarcity of the broadcast spectrum is no longer the driving economic force allowing the regulator to have some say in the matter? What you are going to see is the interface of copyright and the public purse, the spending aspect of public policy. On Canadian content issues, I think there will be a move away from a regulatory environment to a funding environment. In the era of the Internet, or the five-hundred-channel universe in the broadcast context, there should be a few Canadian broadcasters or content providers. I think there will be a paradigm shift in the regulatory environment that tries to bring legal rules to bear on this sort of activity.

51. On the other hand, particularly in the copyright context, in Canada we are struggling with many of the same issues as is the United States. We have an

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100 For a discussion of the legal impacts of telemedicine, see Lynette A. Herscha, *Is There a Doctor in the House? Licensing and Malpractice Issues Involved in Telemedicine*, 2 B.U. J. SCI. & TECH. L. 8 (1996).

101 *See* Broadcasting Act, 1991, ch. 11, 1991 S.C. 117, 119 (Can.).

102 *See id.*

equivalent to the Lehman Report,[103] and we have a very tough job ahead of us to get it right in terms of the changes that are required to be made to the Copyright Act. Professor Samuelson said John Barlow wrote a piece in *Wired* [104] that was sounding the death knell for copyright.[105] Could you imagine enforcing a copyright regime in the world where the medium is no longer based on paper, the primary physical dimension to all previous copyright regimes? Barlow makes the point in *Wired* that we have to think of other types of relationships and mechanisms for rewarding creators.[106] Barlow argues that copyright is dead even if the lawyers still fight tooth and nail for the system.[107]

52. I disagree vehemently with that. I analogize the Information Superhighway, the Net, to the physical highway where it is precisely because cars can go 150 miles an hour that you need speed limits. In fact the argument would be that the faster cars can go, the more necessary are speed limits. So the Net presents a technological challenge to copyright the likes of which we have never seen, and one way to look at copyright historically is that it is responding to technological challenges. The last big one -- the photocopier -- pales in comparison to what the Net can do because of the simultaneous capability of transmitting content in a way that a photocopier could never match.

53. However, just because the Net is the ultimate copyright violation device does not mean we should throw in the copyright towel. People such as software and content developers need copyright because another phenomenon is digitization of all content, so that much of what is put over the Net is not just straight text. It has got images, music, video, and so forth, so we need copyright. On the other hand, there is the real danger that as we move from a paper-based copyright environment to an electronic one, that we perhaps overdo it. Doctrines such as fair use in the United States[108] -- in Canada we call it fair dealing[109] -- allow things like browsing, being able to go into a bookstore or library and flip through a book on the shelf before you

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103 WORKING GROUP ON CANADIAN CONTENT AND CULTURE, COPYRIGHT SUBCOMMITTEE, COPYRIGHT AND THE INFORMATION HIGHWAY: FINAL REPORT OF THE COPYRIGHT SUBCOMMITTEE (1995).

104 John Perry Barlow, *The Economy of Ideas: A Framework for Rethinking Patents and Copyrights in the Digital Age*, WIRED, Mar., 1994, at 85.

105 *See id.* at 85 (arguing that disassociation of information from the physical plane makes proprietary legal models inappropriate).

106 *See id.* at 129 (proposing that encryption and speed to the marketplace will protect and reward creators).

107 *See id.* at 89.

108 *See* 17 U.S.C. § 107 (1994).

109 *See, e.g.*, Copyright, R.S.O., ch. 34, § 164 (1991) (proscribing fair dealing in Ontario).

buy it. One concern that I have with the contract paradigm is that if we finesse the copyright system and simply go to contract, how will we recreate the browsing phenomenon? How will we allow for people to flip through the whole book, and not just the one or two pages that someone puts on their web site? In the fair dealing context, particularly in an academic environment, we have to be extremely careful that we do not think of the Net as simply the old paper-based environment, but as a faster and slicker system. Therefore we cannot just recreate all the same rules. I think we need some new ones.

54. The final issue that I wanted to raise is that of libel on the Net. I bring this topic up because it is a faculty-oriented venue today. One of the interesting libel cases coming out of Toronto recently involved a professor in a faculty peer review role criticizing a fellow colleague, and sending that colleague a dismissal letter.[110] Instead of sending the letter in paper form in a sealed envelope, however, he made the mistake of simply putting it on the e-mail system, where every other professor could read the fine detail. The lawsuit arose when the colleague brought a grievance under the collective bargaining agreement to protest the dismissal, but then brought a separate defamation case.[111] The finding was that the defamation case was not barred by the collective agreement.[112] It really was a separate, stand-alone right of action.[113] The telling story, of course, is that we are becoming so accustomed to the Net in certain environments that we do not realize that there is a certain "nettiquette," or rules to be observed.

55. In the libel area, we have been following up in Canada on your earlier *Cubby v. CompuServe* case,[114] and the *Prodigy*[115] decision more recently. We are searching for the right answers as much as you are on the question of liability for service providers. There is a fascinating contractual aspect to what is going on, as you ask subscribers to obey rules governing what they are going to do. More interestingly, there is the phenomenon that if you exercise editorial control, the *Prodigy* court says you may in fact be responsible for all kinds of libelous statements.[116] If you do not exercise editorial control, however, you may be clear of

110 *See* Egerton v. Finucan, 1995 Ont. C. J. LEXIS 2082.

111 *See id.* at *2.

112 *See id.* at *4.

113 *See id.*

114 776 F. Supp. 135 (S.D.N.Y. 1991) (finding a service provider was a mere distributor of libelous information and could not be held liable for defamatory statements by third parties).

115 *See* Stratton Oakmont, Inc. v. Prodigy Servs. Co., No. 31063-94, 1995 WL 323710 (N.Y. Sup. Ct. May 24, 1995) (noting exercise of editorial control as an important factor in service provider liability).

116 *See id.* at *7.

liability.[117] That is not a real answer to a commercial operation like a bank that simply cannot have certain types of statements on the Net. Again, if you think about it, the Net is a new model. It displaces the editorial filter for the first time, and everybody becomes a source of creative content. I would like to think that we are going to do more than simply go into the old analogies about an old telegraph case up in Canada. The Net really is new, and we need some new legal direction for it.

Discussion

Steve Bauer:

56. This session is on Internet issues and their relation to intellectual property. I have a few examples of things that I think people would argue are new issues that confront the law because of the Internet. One example is the linking of web sites. How easy is it to copy databases? International borders do not protect against the transfer of information. In the trademark field, domain names are a new issue.[118] Will trademark law be able to handle that? An interesting example of Internet use that I have started to see is electronic, or web-site-based, textbooks for courses. Through a professor's web site page, students are pointed from week-to-week to other web sites, as they go through the course.[119] With those kinds of examples, are we facing a discontinuity in the law where we will need Congress to come in and create a new intellectual property law? Or is this just one more evolutionary step in the law that courts can handle by letting market forces deal with it?

Pamela Samuelson:

57. I heard a very wonderful talk by French copyright Professor Andre Lucas at a conference in Madrid.[120] He said that there are two extreme positions that we should avoid. One is that we have to reinvent the law from scratch.[121] The other is that this is just one more in a long line of changes; copyright law will be just fine, if

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117 *See id.*

118 *Domain Name Can Be Trademark, District Court Rules*, COMPUTER LAW., July 1996, at 28, 28 (1996).

119 For an example visit the *Copyright Casebook Homepage* (visited Jan. 3, 1997) <http://www.lawlib.uh.edu/faculty/Cjoyce/casebook.html>.

120 *See* Andre Lucas, *The Council Directive of 14 May 1991 Concerning the Legal Protection of Computer Programs and Its Implications in French Law*, 14 EUR. INTELL. PROP. REV. 28, 31 (1992).

121 *See id.* at 29.

we all have enough confidence in it.[122] He said this is a time when the only sensible thing to do is to work through the issue as long as you can while staying within the existing legal framework.[123] Realize that these issues are about real world, conceptual problems of doctrine that may need to get readjusted over time. While no one that I talked to thinks copyright is going to disappear tomorrow, I think it is the case that in 20 years we are going to have a copyright law that is going to look somewhat different than the copyright law that we have today. It is going to have some configurations that it did not have before. We do not really know what that is going to look like because for the most part, lawyers are especially caught up in the paradigm of today. Until we try things out and see how they develop, we do not know what things are going to happen.

58. I see larger changes in copyright than some people would predict. In digital form everything falls within the definition of literary work under copyright law, because everything is in bits. Most of the things that copyright law has traditionally regulated have been medium-specific, and there have been medium-specific rules like those covering sound recordings that have their own set of exclusive rights.[124] Well, in the digital environment we have one medium in which everything can exist, and, in fact, one work in digital form can be many different kinds of work. You can simply process sound as picture or picture as sound and it is still the same set of bits. It just depends on what kind of directions you give to the processor.

59. So it seems to me that the tight categories of copyright law are going to be eroded to some degree, and we are going to need to get back to basic principles and figure out what is the correct way of confronting a number of these digital issues. I think that there are some other parts of copyright law that will get shifted around as we see how this new domain develops. Most specifically, some new law must regulate the content of databases if copyright protection is only available when there is creativity in the selection and arrangement of data elements.[125] This is because in electronic form it is really easy to download the entire contents and reselect or rearrange, and some databases do not have very creative content. We have a legal regime that is basically based on a set of principles that may not yield the desired results in the digital environment.

60. The Europeans have been out in front on this issue. They have created a

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122 *See id.* at 29-30.

123 *See id.* at 29-32.

124 The exclusive rights in sound recording works are limited to the right to duplicate the actual sounds of the recording. *See* 17 U.S.C. § 114 (1994). Another medium-specific exception is the reduced protection period afforded to semiconductor chips. *See* 17 U.S.C. § 904 (1994).

125 *See* Mark L. Gordon et al., *Data Deals: The Essence of Multimedia Transactions*, COMPUTER LAW., Nov. 1993, at 10, 11.

brand new law that will protect data in databases from unfair extractions,[126] and there will likely be legislation on this subject in the United States. I think the reason that Commissioner Lehman did not include that particular provision or set of provisions in this bundle, is that the European directive was still in the final process of approval, and we did not really know what it was going to look like. There are also some international negotiations about it right now, but there was going to be potentially enough to talk about regarding the digital copyright matters that it made sense to leave databases to another day. Strategically, it might have been a good idea too, because there is probably going to be a fight out there about the database directive, and so if what you wanted to do was get the White Paper legislation through first, wrapping up something that would be controversial would slow down the package. I think that those are explanations for why database issues did not make it in.

Maureen O' Rourke:

61. We have not anticipated all the types of technology that will be out there, but you need to be technically adept before you make any change in the law. For example, there are static[127] and dynamic[128] links. How are you going to treat each? Another point is that the flow of data over international borders just leads you back to the problem of uniformity, foreshadowing the need at some point for a global harmonization effort. Simply, you cannot figure out where particular bits came from and even if you can locate the source, you cannot stop data from flowing over your borders. So I think Professor Samuelson is right about the database directive. We are going to have different law in the United States applicable to databases as soon as Europe adopts its own directive.

62. Today we really have different law with respect to computer software and decompilation rights than you have in Europe under the database directive,[129] and so I think there will have to be some high-level negotiations that will try to achieve uniformity. From my contract-based perspective, diversity in law is a bad thing, because it tremendously increases transaction costs. So I think there will be a push, certainly from the publishing industry, to try to make the law uniform, particularly since many of the publishing companies are multinational corporations. So one of

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126 Amended Proposal for a Council Directive on the Legal Protection of Databases, 1993 O.J. (C 308) 1, 8.

127 A static link is one that the user must click on to follow.

128 A dynamic link is one that automatically occurs when the user loads the web page. A user can be unaware that a page contains dynamically linked information.

129 *See* Barry D. Weiss, *Barbed Wires and Branding in Cyberspace: The Future of Copyright Protection*, in UNDERSTANDING BASIC COPYRIGHT LAW 1996, at 397, 404 (PLI PATENTS, COPYRIGHTS, TRADEMARKS & LITERARY PROPERTY COURSE HANDBOOK SERIES NO. 450, 1996).

the things I think we need to be careful about is making sure that the public interest side of the issue is well represented, and that the debate, at both the national and the global level, is not captured by publishers and copyright owners.

George Takach:

63. In reference to Professor Samuelson's Madrid commentary,[130] where are we on the spectrum? I have a bunch of clients that come every week with the next mousetrap, and I am unsurprised because I have seen it all before. The Net, however, is radically different. Thompson, a Canadian company, is making a $3.4 billion bid right now for West Publishing.[131] This is probably a Canadian company thinking that they are going to get into the information age through West. I think West could become anachronistic within five years, maybe ten. This copy of the *Journal of Science & Technology Law* was only published in a CD-ROM and electronic format.[132] If you try to get the NAFTA agreement from the Canadian government, you can no longer get it in a paper-based form. You get it on a CD because it is a lot cheaper for the government, and is more efficient because it has a search function. What does this do to the publishing industry and then to copyright law? I do not think it is just more of the same.

64. The final area I will address is data privacy protection in the international context. Professor Samuelson mentioned that Europe is in the forefront in terms of database protection.[133] In my view, they are also leading the charge in terms of personal information protection. Interestingly, since 1994, Canada has picked up virtually the same set of protection rules,[134] giving them the only private sector applicable data protection laws in North America. There was a time when each industry could do its own kind of privacy thing, and the banks could all have voluntary codes. In the age of the Net, that old way of thinking is history and we are destined to have some real clashes. There is a recent Illinois case, *Dwyer v. American Express*,[135] where the cardholder was upset that his name was being put

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130 *See* Pamela Samuelson, *Digital Media and the Law*, COMMUNICATIONS OF THE ASS'N FOR COMPUTING MACHINERY, Oct. 1991, at 23.

131 The Thompson-West deal has been hampered by anti-trust concerns. *See Business Digest*, BALTIMORE SUN, Dec. 25, 1996, at 2C.

132 *The Boston University Journal of Science & Technology Law* has published on compact disc since its inception and has 1995 and 1996 volumes available. For more information visit the Journal's web page at <http://web.bu.edu/LAW/publications/science_technology.html>.

133 *See* Robert E. Boehmer & Todd S. Palmer, *The 1992 E.C. Data Protection Proposal: An Examination of its Implications for U.S. Business and U.S. Privacy Law*, 31 AM. BUS. L.J. 265, 301-02 (1993).

134 *See* Access to Information Act, R.S.C., ch. A-1, § 19(1) (1995) (Can.).

135 652 N.E.2d 1351 (Ill. App. Ct. 1995).

on various mailing lists and sold by American Express. The judge, using a free-market approach, ruled that it is just a name.[136] This is how people make money today. It is precisely that kind of activity that is prohibited now in Quebec.[137] So if you are American Express, and you are doing business in North America and there is a single database sitting on some computer somewhere, it is no longer just an inconvenience that Quebec is off the page; you cannot operate effectively or efficiently. I am wholeheartedly with Professor O'Rourke in another aspect to all of this. We are going to have to come up with some international rules concerning the Internet quickly or it is going to be an all too busy world for lawyers.

Steven Bauer:

65. Does any panel member care to comment on the issue of preemption in relation to this area of law?

Maureen O'Rourke:

66. I have had extensive discussions with the National Conference of Commissioners on Uniform State Laws ("NCCUSL")[138] and Conference Legislative Council John McCabe about the new Article 2B on licensing. I was writing an article on the issue of preemption,[139] specifically, on the decompilation[140] provisions in license agreements, and I read one of the drafts of Article 2B and could not figure out whether the NCCUSL meant to preempt such provisions or not. This was because you would read one section which would seem to say no, and then read another section which would seem to say they were. So I talked to Mr. McCabe and he referred me to Debra Pearlman, one of his legislative assistants. She said they did not know so they just drafted it both ways. I said that was not helpful to me. I think it will be interesting to see what they do, but it seems to me that the approach of the Lehman group will be to say the Uniform Commercial Code ("UCC") drafters should go forth and do what they want, and validate the terms of the shrinkwrap

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136 *See id.* at 1356.

137 Loi No. 68 sur la protection des renseignements personnels dans le secteur prive, Assemblee Nationale, Deuxieme Session, Trente-quatrieme Legislature (1992).

138 The National Conference of Commissioners on Uniform State Laws has proposed code applying to transactions in information. *See Draft Uniform commercial Code Revised Article 2B Licenses § 2B-103* (visited Jan. 3, 1997) <http://www.kentlaw.edu/ulc/uniform/uccart2/ucc2b296.html>.

139 Maureen A. O'Rourke, *Drawing the Boundary Between Copyright and Contract: Copyright Preemption of Software License Terms*, 45 DUKE L.J. 479 (1995).

140 Decompilation is the process of reverse engineering computer code. *See* Sega Enters. v. Accolade, Inc., 977 F.2d 1510, 1514 (9th Cir. 1992).

agreement.[141]

67. Some say the approach of the White Paper is that there is nothing that cannot be licensed.[142] I am not sure if this is right. I come out as the freedom of contract person, but I think there are limits to that since there are limits within the UCC itself. The preemption issue needs to be looked at much more closely. David Rice would hold that the decompilation provisions, for instance, are preempted all the time.[143] Rob Merges might argue that such provisions should not be preempted in the negotiated context.[144] I went one step further and said that even in the standard form context, we should at least make a deeper inquiry before we preempt these things as a matter of law. Clearly, there is a diversity of opinion out there, and I think this is an area where you have to be careful about how you actually conduct the drafting process, because that is another thing that I could not figure out. The NCCUSL seems to have no process. They just get a bunch of people together and those who know what is going on can ask for copies of drafts, but for others it just shows up and creates havoc.

Pamela Samuelson:

68. Mark Lemley wrote an excellent article about preemption,[145] arguing that intellectual property, at least for mass-marketed things, ought to be the predominant balancer of interests. To get back to what Mr. Takach was asking about what to do if contracts become the norm, Jane Ginsberg, who is far from a radical in the copyright field, has come up with a concept of "fair breach" in an essay she wrote entitled, "Copyright Without Walls?"[146] She expects that if we move away from copyright, and toward contract, the same kind of public policy problems that yield themselves in fair use contexts will appear in what she has designated as a right of fair breach.[147] Unless the people who are doing the drafting of the contracts

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141 *See Seventh Circuit Reverses ProCD, Rules Shrinkwrap Valid,* 13 COMPUTER LAW., July 1996, at 26, 26 (1996).

142 *See* Weiss, *supra* note 129, at 417-418; *see also* Carol Hildebrand, *White Paper Urges More Liberal Software Licenses,* COMPUTERWORLD, Oct. 7, 1991, at 4.

143 *See* David A. Rice, *Public Goods, Private Contract and Public Policy, Federal Preemption of Software License Prohibitions Against Reverse Engineering*, 53 U. PITT. L. REV. 543, 547 (1992).

144 *See* Robert P. Merges, *Intellectual Property and the Costs of Commercial Exchange: A Review Essay*, 93 MICH. L. REV. 1570, 1612-13 (1995).

145 *See* Mark A. Lemley, *Intellectual Property and Shrinkwrap Licenses*, 68 S. CAL. L. REV. 1239, 1239 (1995).

146 Jane C. Ginsburg, *Copyright Without Walls?: Speculations on Literary Property in the Library of the Future*, 42 REPRESENTATIONS 53 (1993).

147 *See id.* at 61-65.

are really drafting in a way that reflects this kind of public policy push-pull, I foresee a judicial concept of breach popping up because I do not see a public policy balance in the current draft of the NII White Paper legislation.

69. The sense that I have from people who know Washington, is that this year is going to be given over to politics. I do know that there are a number of concerns that have been expressed about the bill in its present form,[148] and one of the things that I have been doing in the last three months is working with a group called the Digital Future Coalition ("DFC"), a coalition of 27 different organizations, including the Consumer Federation of America, a number of library associations, some learned societies, and the computer industry associations. The Coalition has a very broad mixture of people, and has come up with an alternative legislative package that would do some tweaking to some of the current provisions, and would add some other positions that we think would maintain the balance.[149] If you take the White Paper at its word -- that what it is trying to do is in fact maintain the existing balance in the law[150] -- then it seems to me that there are some things that you could do to make sure that everyone knows that the balance is still there. I know even that the Register of Copyrights has expressed concern about the overbreadth of the anti-circumvention provision, for example.[151] Another issue is the online service provider liability issue. Maybe there needs to be a separate limiting provision to resolve the issue rather than leaving the online service providers out there hanging in the wind. It seems to me that there are some refinements needed, and whether or not we will see a bill soon I do not know.

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148 H.R. 2441, 104th Cong. (1995). The 104th Congress did not act on this bill in 1996.

149 The Coalition has proposed changes to sections 106, 107, 108, 109, 110, and 1201 of the Copyright Act. *See Digital Future Coalition Amendment to "NII Copyright Protection Act"* (visited Jan. 3, 1997) <http://www.ari.net/dfc/legislat/pagers.htm>.

150 *See Statement of the Members of the Digital Future Coalition on H.R. 2441* (visited Jan. 3, 1997) <http://guess.worldweb.net/dfc/copyright.htm>.

151 *See id.*