easy answers to these issues under prevailing antitrust law—and little direct precedent in reported cases—scrambling could eventually become the Department's vehicle for limiting the reach of its *Phoenix* decision. If *Phoenix* represents a judgment by the Department that antitrust essentially does not apply to cable television, then cable systems could squelch "intermodal" competition¹³³ from alternative delivery technologies with little restraint. In that event, of course, the dispute about the product market will have proved irrelevant; even if the FCC's broad video programming market were correct, cable will have monopolized.

Without access to the evidence, it is impossible to decipher the precise issues now being examined by the Department or assess the competitive reasonableness of restrictions involved in the various scrambling scenarios implemented since 1986. 134 This much appears self-evident, however. Whether cable systems are subject to competition depends on the nature and number of alternative programming sources available in the market in question. 135 If anticompetitive means are used to exclude some of that programming, serious antitrust issues are presented. Even if cable is a natural monopoly, therefore, it must abide by the antitrust laws in its relations with competitors—at least some of them, some of the time.

and ideologically colored." Satellite "Fair Marketing" Bills Introduced in House, Senate, Multichannel News, Apr. 6, 1987, at 38, col. 2. In July 1987, the Department suggested that its investigation into scrambling was continuing but offered little hope of quickly reaching a definitive conclusion. See infra note 134.

133 This term refers to competition among different modes of delivering goods or services, e.g., between cable systems and alternative delivery technologies such as SMATV. See Scrambling of Satellite TV Signals, Notice of Inquiry, 104 F.C.C.2d 1444,

ara. 2 (1986).

135 See House Report, supra note 10, at 66 ("effective competition" determined by "consider[ing] the number and nature of services provided [by the cable system], compared with the number and nature of services available from alternative sources and, if

SOME UNHURRIED REFLECTIONS ON COPYRIGHT

CHARLES McC. MATHIAS, JR.*

Unhurried reflections are a very rare commodity in today's world. They must seem particularly elusive here in the heart of New York, where the action is faster than anywhere else. Let us imagine, therefore, that we are somewhere else. Our vantage point, perhaps, is a rock-break in the Blue Ridge Mountains high above the Potomac River, where we have paused to orient ourselves. It is a spot to take stock of the prodigious changes in the world; all kinds of changes: social, economic, legal, technological. Since we are lawyers, interested in intellectual property, we can scan the changes in the field of copyright, and, if we are successful, put those changes into some sort of useful perspective.

The precise location of our mountain is unimportant. This indifference to geography itself suggests a significant fact about the world in which copyright policy issues must today be resolved. Things were very different a couple of decades ago. Then, the geography of American copyright bore an uncanny resemblance to that famous New Yorker 1 cover map dominated by the terrain of Manhattan, with the rest of the globe receding into insignificance over the horizon. The world of publishing-of books, of music, of almost every kind of artistic endeavorseemed to be concentrated here, within a few blocks, or at most a few miles, of where we now meet. Hollywood, it is true, was a bright beacon on the copyright horizon, where the motion picture industry confronted the outmoded Copyright Act of 19092 with new challenges. Washington, I suppose, would have shown up somewhere on the map probably in a swamp. There, for decades, the Copyright Office and a few members of the Congress had struggled with a seemingly Sisyphean task: to revise a federal

of date uncovered any "significant evidence" of collusion among cable programmers or cable operators. Hearings Before the Subcomm. on Telecommunications and Finance of the House Comm. on Energy and Commerce, 100th Cong., 1st Sess. 2-3 (1987) (statement of Charles F. Rule, Acting Assistant Attorney General). The Department's investigation into restrictions imposed on the distribution of scrambled programming, which is typically limited only to cable system operators, apparently continues. In the mean time, at least one antitrust suit has already been brought by those involved in the home earth station market alleging that cable programmers have conspired to restrain competition from third-party "packagers" of satellite programming. Personal Preference Video v. Home Box Office, Inc., No. CA-40-86-235-K (N.D. Tex. filed Mar. 25, 1986).

^{*} Charles McC. Mathias, Jr., former Senator from Maryland, served as the first chairman of the reconstituted subcommittee on Patents, Copyrights and Trademarks. Mr. Mathias is currently a partner at the law firm of Jones, Day, Reavis & Pogue.

This Article is printed essentially as it was delivered at the Herman Finkelstein Lecture, at the Benjamin N. Cardozo School of Law, on March 12, 1987. This continuing lecture series honors Herman Finkelstein, the retired General Counsel of the American Society of Composers, Authors and Publishers, and Director of the Nathan Burkan Memorial Competition.

New YORKER, Mar. 29, 1976 (cover cartoon by Saul Steinberg).
Act of July 1, 1909, ch. 320, 35 Stat. 1075 (codified as amended at 17 U.S.C. §§ 1-810 (1982 & Supp. 1985)).

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copyright act that was itself older than many of the men and women who were devoting countless thousands of hours to the effort to change it. In fact, the Juke Box Bill3 made the labors of Sisyphus look easy, by comparison. But for most practitioners and students of copyright law, the locus of federal power in the copyright was more likely to be found in the courts than in Congress and preeminently, here in New York, where the great judge Learned Hand and his colleagues and successors on the Second Circuit Court of Appeals took the lead in applying the 1909 Act to the various conflicts between and among creators, distributors and users of copyrighted materials.4 A few foreign capitals would have been found on the map as well. But for the most part, the rest of the world figured only dimly in the geography of copyright. The rest of the world returned the favor, content to think of copyright, when it thought of it at all, as an arcane subject best left to those eccentric syllogizers who wanted, for some unaccountable reason, to come to New York to practice.

That world is gone, and we all know why it is gone. When Professor Benjamin Kaplan came to Columbia University twenty-one years ago to deliver lectures that were later collected in the book, An Unhurried View of Copyright, he began by noting that "[a]s a veteran listener at many lectures by copyright specialists over the past decade, I know it is almost obligatory for a speaker to begin by invoking the 'communications revolution'...'

In the spirit of "plus ça change, plus c'est la même chose," I will invoke the same spirit here. The technological revolution of recent decades has transformed the geography of copyright in many ways. The new venues of copyright controversy include the garages of Silicon Valley, the factories and marketplaces of the

nations of the Pacific Rim,⁹ the geostationary communications satellites poised silently in space,¹⁰ and, indeed, millions of living rooms around the country and throughout the world. Each one, an arena of incredible powers, producing original works of intellectual creation, but even more pervasively receiving, manipulating, copying, and disseminating existing work silently, effortlessly, at the push of a button.¹¹

Technological developments have expanded the world of copyright in another way as well. It is a cliché to observe that today's marketplace is global, but nowhere is the cliché truer than in the case of copyrighted works. ¹² For American policymakers, the role of copyright in world trade is particularly significant. ¹³ The world's consumers may spurn American automobiles; the world's industries may pass over American capital goods; the world's governments may erect barriers to American agricultural products; but the world's appetite for American works of authorship—for our books, our music, our films, our computer programs—is insatiable. ¹⁴ In an otherwise bleak trade picture, trade in copyrighted materials stands almost alone in providing a consistent surplus. ¹⁵

The expanding map of copyright now includes many venues

³ The Juke Box exemption originated in Section 1(e) of the 1909 Act and provided an express exemption to infringement of musical copyrights when a work was played by jukeboxes in places where no admission was charged. The exemption was redefined and restricted, see Copyright Act of 1976, 17 U.S.C. § 116 (1982), and now provides for the payment of royalties via a compulsory license plan. The rate of this royalty payment has caused much difficulty. See Amusement & Music Operators Ass'n v. Copyright Royalty Tribunal, 676 F.2d 1144 (7th Cir.), cert. denied, 459 U.S. 907 (1982).

⁴ See, e.g., Arnstein v. Broadcast Music, Inc., 137 F.2d 410 (2d Cir. 1943); Sheldon v. Metro-Goldwyn Pictures Corp., 106 F.2d 45 (2d Cir. 1939), aff d, 309 U.S. 390 (1940).

⁵ B. KAPLAN, AN UNHURRIED VIEW OF COPYRIGHT (1967).

⁶ Id. at 1.

^{7 &}quot;The more changes there are, the more does it seem to be only the same thing over again." Classical and Foreign Quotations (W.H. King ed. 1965).

⁸ Santa Clara County, California includes, "some of America's most successful and innovative companies" such as Apple Computer and dozens of other high technology firms, many of which began as small, home-based businesses. Taylor, Sad Tales of Silicon Valley, Time, Sept. 3, 1984, at 58.

⁹ Some of these countries are among the United States' most favored trading partners. They are also among the countries who frequently pirate copyrighted works from the United States. See infra note 13.

¹⁰ The Communications Satellite Act of 1962, 47 U.S.C. §§ 701-757 (1982 & Supp. 1985), created the basis for the current global system of satellite communications technology. The capability of "transborder" transmissions of video programming has brought international copyright protection to this area. Schneider, Competitive Challenges of Global Telecommunications, Dep't St. Bull., Oct. 1984 at 43, 43-44.

¹¹ See, e.g., Sony Corp. of Am. v. Universal City Studios, 464 U.S. 417.

¹² Demand is international both legally, as under the Berne Convention's provision for concurrent publication, see infra notes 18-24 and accompanying text, and illegally through piracy. "A copy of a book, a recorded tape, [or] a film, can be taken as hand luggage to a dozen countries today and thousands of copies made from it tomorrow." Hennessey, A Comprehensive Study of Worldwide C'right Issues, BILLBOARD, Jan. 28, 1984, at 63 (quoting S. STEWART, INTERNATIONAL COPYRIGHT AND NEIGHBORING RIGHTS, at v (1983)).

¹³ In 1982, 12 of 15 leading trading partners accorded preferential status by the United States government, failed to uphold United States copyrights. These twelve were Taiwan, Korea, Hong Kong, Mexico, Brazil, Singapore, India, Argentina, Thailand, Chile, the Philippines, and Peru. AAP Urges Trade Laws to Prevent Piracy, Pub. WEEKLY, Feb. 24, 1984, at 70.

¹⁴ In fact, the demand is so high that "[i]n some countries, entire industries are built on the theft of intellectual property." Id. However, the demand is not just for illegally obtained materials. For example, China's first international book fair, held in September 1986 in Beijing, featured United States companies and organizations which made up the largest single group at the fair. Feldman, Beijing's First Book Fair, Pub. Weekly, Nov. 7, 1986, at 24-25.

The entertainment industry is creating wealth for the nation as well as for the entertainers and the people they work with. Ask yourself: In America's

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unfamilar to traditional practice of copyright law. Prime among them is the nation's capitol. This fact is somewhat surprising. Attentive copyright lawyers may detect a sigh of relief arising from the Capitol upon the completion of the mammoth effort of copyright revision. The conventional wisdom was that Congress, having set copyright law on a new path at last, could now set the topic aside for a few decades. Such a sentiment prevailed in the Senate Judiciary Committee where I was then serving. No sooner was the ink dry on the Copyright Act of 197616 than the committee abolished the subcommittee with jurisdiction over copyright matters. It neglected, however, to abolish invention, innovation, and ingenuity. Within a few years, however, the shortsightedness of at least one of those decisions became apparent, and the subcommittee was reconstituted by sheer necessity. The two factors I have already mentioned-advancing technology and growing concern with issues of world trade-quickly put copyright high on the Congressional agenda, and Washington back on the copyright map.

I would like to share with you some thoughts on the role of Congress in meeting the challenges now confronting copyright. I will speak a little about what Congress has accomplished in the past few years, but more about the hard choices that it has yet to make. In particular, I would like to highlight the role of three factors that influence the decisionmaking process in Washington: trade, technology, and education.

In some ways, the injection of copyright questions into the debate on United States trade policy is a welcome development. It reflects the reality that I have already mentioned. The world trade in copyrighted work is an area in which the United States is not only competitive, but clearly dominant.17 The drive to raise the standards of copyright protection worldwide will not, by itself, insure the continuation of that dominance. Consumers

perilous trade situation, what merchandise remains among our big earn-

Aircraft, thanks largely to Boeing and the defense industry, is number one, with a trade surplus of \$10.8 billion. But in second place and rising fast is entertainment, which earned us a \$4.9 billion surplus last year and may do \$5.5 billion this year. Broken down, exports of television programming will net the U.S. \$500 million; motion pictures, \$1.2 billion; videocassette recordings, \$1.8 billion; music recordings, \$1.4 billion.

Frank and Zweig, The Fault Is Not in Our Stars, FORBES, Sept. 21, 1987, at 120, 122. 16 Pub. L. No. 94-553, 90 Stat. 2541 (codified as amended at 17 U.S.C. §§ 101-914 (1982 & Supp. III 1985)).

17 See supra notes 12, 14 and accompanying text.

around the world may someday decide that they prefer books from Great Britain, musical recordings from France, or motion pictures from India. If they do, our competitive edge in these markets will suffer. But more effective copyright protection will at least make it less likely that these consumers will abjure American works, not in favor of those other countries, but in favor of producers who fly the pirate flag.

In practical terms, the inclusion of copyright questions in trade policy raises their profile dramatically. At a time when the Congress is besieged by urgent appeals to address intractable problems such as the budget deficit, this development is a beneficial one. It breathes new life into old issues, and brings into broad daylight controversies that would otherwise appear to the Congress discouragingly obscure and decidedly remote from Main Street.

There is no better example of this than the question of United States adherence to the Berne Convention.18 Most students of copyright would agree that this issue is important. There is even a general consensus in favor of U.S. adherence, without substantial dissent from the major representatives of copyright user interest.19 There is also a good deal of agreement, although not complete consensus, on what changes would need to be made in U.S. law in order to meet Berne standards.20 Furthermore, the hearings held in the 98th Congress21 provide a detailed record on the benefits of adherence. Joining Berne would eliminate the need to use the gyrations of the "back door to

¹⁸ Convention Concerning the Creation of an International Union for the Protection of Literary and Artistic Works, Sept. 9, 1886 [hereinafter Berne Convention], reprinted in M. NIMMER, 4 NIMMER ON COPYRICHT app. 27 (1985). The original signatory nations were: Great Britain, Germany, Belgium, Denmark, Spain, France, Italy, Japan, Sweden, Switzerland, and Tunisia. The Berne Convention has been revised five times since its enactment, most recently in 1971.

¹⁹ See Resolution 301-1, A.B.A. Section on Patent, Trademark & Copyright Law, Summary of Proceedings, Annual Meeting 1985 (LEXIS, ABA library, Ptclaw file); see also, Hennessey, CISAC Meet Urges Action on Berne, BILLBOARD, Oct. 25, 1986, at 3; Press U.S. to Join Berne Cright Convention, Variety, Apr. 23, 1986, at 4, col. 2; Hennessey, Copyright Experts Agree on Worldwide Resolution, BILLBOARD, June 22, 1985, at 1; but see U.S. Blows Hot & Cold on Berne Convention, VARIETY, Sept. 16, 1987, at 1, col. 2.

²⁰ Article 5(2) of the Berne Convention, supra note 18, requires that no "formality" restrict the rights granted. This is in direct conflict with the Copyright Act of 1976, 17 U.S.C. § 401 (1982 & Supp. III 1985), which requires the affixation of the @ symbol, year of publication, and name of copyright holder. See Note, Abandon Restrictions, All Ye Who Enter Here!: The New United States Copyright Law and the Berne Convention, 9 N.Y.U. INT'L L. & Pol. 455 (1977).

²¹ How to Protect the Nation's Creativity By Protecting the Value of Intellectual Property, 1984: Hearings Before the Subcomm. on Patents, Copyrights and Trademarks, 98th Cong., 2d Sess. 1183 (1984) [hereinafter Hearings].

Berne"²² to obtain the optimal level of copyright protection throughout the world for U.S. works. It would assure our country an active role in the shaping of international copyright policies in the future.²³ It would open copyright relations with about twenty countries with which we currently have none.²⁴ It would underscore our common interests in copyright with the rest of the industrialized world, and leave the U.S.S.R. standing virtually alone outside the Berne umbrella. All of those considerations would be of interest to Congress.

This is a happy confluence of factors. But standing alone, it would probably still not be enough to nudge the United States into Berne. The pro-Berne coalition might have enough power to get the legislative process started, but without one additional ingredient, the effort would probably be derailed at the first sign of resistance from almost any quarter.

The added ingredient that may make the difference is the perception that United States adherence to the Berne Convention would aid American competitiveness in world trade. The witness from the office of the United States Trade Representative hit the nail on the head when he testified before the Subcommittee on Patents, Copyrights and Trademarks in 1984 that, "United States adherence to Berne would strengthen our position in discussions with other governments regarding the protection they afford the works of United States nationals under their copyright laws."25 Developments since that hearing have strengthened the perception that Berne adherence would be a useful tool in international trade negotiations. The agreement to put intellectual property issues on the agenda of the next round of talks of the General Agreement on Tariffs and Trade has heightened interest in the question of establishing enforceable international standards for intellectual property protection through the GATT framework. In copyright, those standards are found in the Berne Convention, and nowhere else. United States adherence to Berne thus may be a bellwether of the prospects for success in a crucial aspect of the Uruguay round of GATT talks. The influence of GATT issues on the development of United States copyright law is amply demonstrated by the fate of the manufacturing clause. Authors and publishers have railed against it for decades. Through their efforts, the scope of the clause was narrowed over the years. But it took the threat of European retaliation under the GATT to convince the Congress that this relic of America's heritage of copyright piracy should be given a decent burial. If its demise is celebrated by a flood of pirated books, the response should be prosecution rather than resurrection of the clause.

REFLECTIONS ON COPYRIGHT

This year, the Administration, which has supported adherence to Berne for several years, 27 took an additional step of both symbolic and practical importance. It included its support for Berne in the President's message on competitiveness, pledging to submit implementing legislation in the near future. 28 The symbolic transformation of the Berne issue is now complete. What seemed arcane a few short years ago is now locked in the warm embrace of a buzzword—"competitiveness"—thus propelling copyright to someplace near the top of the agenda for the 100th Congress. 29

That does not mean that adherence to Berne is a sure thing; far from it. There are formidable obstacles ahead. Berne would be a politically attractive feature of any competitiveness legislation the Congress may consider. It helps to sweeten a package that the Administration is likely to find, on the whole, hard to swallow. But if the "tradification" of Berne gives it momentum, it also makes it expendable if its presence in the competitiveness package becomes inconvenient. The issue is on the ship's manifest, but the captain may order it jettisoned if it appears too bulky as the vessel leaves port.

27 President's Message to the Senate Transmitting the [Berne] Convention, 22 Weekly Comp. Pres. Doc. 827 (June 18, 1976), reprinted in 98 Copyright L. Rep. (CCH) ¶ 20.378 (1986).

29 H.R. 1308, 100th Cong., 1st Sess. (1987).

²² A "backdoor" is provided in Art. 3(1)(6) of the Berne Convention, supra note 18. This section states that works from nonmember nations may be protected in member nations if first publication of the work takes place in a member country or if the works are published simultaneously in both a member and nonmember country.

²³ Publishing industry representatives, for example, have stated that other countries are "delaying any action on strengthening their own copyright law and will continue to do so unless irresistible pressure" is brought by the United States. Antipiracy Trip Disappoints Publishers, Pub. WEEKLY, Aug. 17, 1984, at 14.

 ²⁴ See supra note 13.
25 Hearings, supra note 21, at 3 (testimony of David Ladd, Register of Copyrights).

²⁶ See J. Reilly, The Manufacturing Clause of the U.S. Copyright Law: A Critical Appraisal of Some Recent Studies, 32 J. COPYRIGHT SOC'Y 109 (1984). Due to heavy opposition from United States printing and book manufacturing interests, the Copyright Act of 1976 did contain a manufacturing clause, although it was substantially modified from its 1891 form, and provided for its own expiration on July 1, 1982. 17 U.S.C. § 601(a) (1976), amended by 17 U.S.C. § 601(a) (1982). Congress subsequently extended the manufacturing clause in 1986. Reilly, supra at 119.

^{28 88}TH ANNUAL REPORT OF THE REGISTER OF COPYRIGHTS, 1985 14-15 (1986) [hereinafter Copyright Annual Report]. Acting Register Curren, after a study was conducted on the advantages and disadvantages of adherence to the Berne Convention, presented the views of the study to the Senate Subcommittee on Patents, Copyrights and Trademarks. He supported the joining of Berne stating that the "benefits of joining led to a 'public and political consensus . . . mak[ing] it consistent with the minimum obligations of Berne." Id. at 15.

How can that be prevented? Those interested in copyright must unite to keep the cargo on board. The Congress already knows that support for adherence to Berne is broad. It must also be convinced that the support is also deep. Berne appears on the copyright agenda of every major copyright interest group. But it must also be at the top of those agendas if it is to be achieved. Furthermore, the pro-Berne coalition must achieve a consensus, not only on the desirability of adhering to Berne in principle, but also on the specific implementing legislation that will be needed to accomplish it.

That means that other goals must be put aside for another day. Creators, for example, must temper their zeal for expanded moral rights30 in order to achieve the broader worldwide protection that Berne offers.31 The differing interests of authors, publishers, the Copyright Office, and the Library of Congress on reforms of the registration system must be harmonized. Performing rights societies must realistically appraise the clout of the jukebox lobby, whose compulsory license in its current state is clearly incompatible with Berne, and take steps to mollify that source of potential opposition. Some of these battles can be fought another day. If the combatants insist on fighting them now, they can be assured that they will fight them outside Berne, not within it.

In short, the copyright world must take to heart the lesson the patent world learned last year in the debate over process patent legislation. "Tradification" helps greatly to put intellectual property issues on the Congressional agenda, but it does not offer them a free ride. It forces choices. It focuses attention on trade-offs. It sometimes creates a tension between refining our domestic laws and accomodating them to international minimum

This Congress marks a window of opportunity for the drive to bring the United States into the Berne convention. Today, the extensive hearing record on the benefits of Berne is hot off the press. In a year or two, that record will be gathering dust. Today, the word "competitiveness" is on every legislator's lips. Before this Congress is over, that buzzword may be tossed down the memory hole, along with its equally fleeting predecessors. The 100th Congress must decide fundamentally whether the United States will take its rightful place in world copyright affairs, or whether once again, we will let the development of international copyright standards move on without our leadership. The outcome of that decision rests in great part with the copyright interests of this country: authors, publishers, film producers, software developers, and all the rest. The coming year will test their vision and their leadership as well as that of the Congress.

REFLECTIONS ON COPYRIGHT

The trade issue presents copyright with new opportunities to be seized and new pitfalls to be avoided. By contrast, copying with new technology is, as Professor Kaplan pointed out, a familiar problem, but no less intractable for all its familiarity.32

Professor Kaplan tells us that Voltaire thought that "plagiarism, even at its worst, 'est assurément de tous les larcins le moins dangereux pour la société.' "33 I hesitate to disagree with Voltaire, but he never saw a photocopy machine or a video cassette recorder.34 We have seen both and we know a newer method of appropriation of writings and ideas.

Home taping is not really plagiarism, but it surely smacks of larceny, and socially dangerous larceny at that. Of course, modern technology has been of incalculable benefit to authors, publishers, and the rest of the copyright world. Thanks to technology, today's authors have access to a vast audience of which Voltaire could never have dreamed. But that same technology also offers authors the threat-indeed, the reality-of widespread uncompensated misappropriation of the fruit of their labors. The threat is not just to authors, but to the entire society which, under the American system of copyright, is the ultimate beneficiary of the incentive offered by the grant of exclusive rights for a limited period.35

Technological advances have transformed the problem of unauthorized copying from an irritant to a plague. The Congress' inability to respond with curative measures is deeply disappointing to all who worry about the health of the copyright system.

When a problem confronts us, we tend to consult familiar sources for a resolution. Paradoxically, the response to the legal

³⁰ Gabay, The United States Copyright System and the Berne Convention, 26 Bull. Copy-RIGHT Soc'y 202, 210-13 (1979).

³¹ Id. at 204-05.

³² B. KAPLAN, supra note 5, at 117-22.

³⁴ See infra note 38 and accompanying text.

³⁵ U.S. Congress Office of Technology Assessment, Intellectual Property Rights in an Age of Electronics and Information 8-9, OTA-CIT-302 (Summary) (Washington DC: U.S. Government Printing Office, April 1986) [hereinafter Intellectual Property Summary]. The report lists the groups who are putting pressure on Congress to adjust the law to accomodate technological advancement.

In 1986, the Register of Copyrights felt confident in advising this audience37 that Congressional response to the Betamax decision38 might include a compulsory license, but that "no one [in Congress] gave serious consideration to forbidding the importation, sale or use of VCR's."39 Today, the situation has reversed. There is no bill in the Senate to impose royalties on the sale of recording machines or blank tape, but there is widespread interest in a proposal to ban at least one species of recording equipment-the digital audio tape (DAT) recorder unless it is

equipped with technology to prevent unauthorized copying.40 Surely there has been substantial progress in the development of anti-copying technology. The systems now coming to market are based on a "bilateral" approach. Encoded elements in the software, for example, a record or tape, are detected by hardware components, which disable or degrade the equipment's ability to record. These systems would permit the copying of unencoded software on any playback equipment, and would not interfere with the playback of encoded software.

The engineers tell us that they can deliver such a system with acceptable reliability and at an acceptable cost. I have no reason to doubt them. But even so, we would do well to sound a cautionary note about the role of technology in "solving" the home taping problem.

First, the experience of copy protection in the microcomputer software field is not very encouraging. Its progress had been bedeviled by a host of problems: compatibility, standard setting, innovative systems to defeat copy protection, and stiff consumer resistance. Of course, the law recognizes a broader scope for legitimate copying uses by music or video buffs. But the point remains that even if effective anti-copying technology is developed, there is no guarantee that the market will accept it.

Second, any system to prevent copying can itself be circumvented by technological gimmickry. Of course, a sufficiently sophisticated system could push the cost of mechanisms to defeat to an unattractive level. Whether this can be done without dramatically increasing the cost of copy protection itself is another matter. In any case, legislation to require copy protection necessarily must include a prohibition on the manufacture or sale of devices to defeat copy protection. The DAT bill includes such a provision.41 The problem comes with enforcement of the prohibition. To the extent that concerns about privacy and government intrusion into the home were marshalled in opposition to proposals to impose royalties on home taping, they will surely reappear in this context as well. Besides, the prospect of basement tinkerers cobbling together innovative copy-protection-defeating devices is decidedly unattractive. There are better goals than high-tech lock picking to which the ingenuity of a latter-day Thomas Edison or Steve Wozniak could usefully be applied.

Finally, political considerations could constrict the usefulness of the technological "fix" to the vanishing point. It is purely a prospective solution which ignores the vast installed base of hardware and the large existing inventory of software. Furthermore, if broadcast and cable transmissions are not encoded, then the technological solution will be limited to "back-to-back" copying of records, tapes, and similar media. The redress it would offer to many authors and publishers is debatable. And, inevitably, any prospective solution will be viewed as a continuing license to poach existing stocks of copyrighted works.

Surely a technological solution to the home taping problem bears close examination. But the comfort it offers may be cold at best. Indeed, any legislative solution to many of the problems facing copyright is necessarily incomplete without a concerted campaign of public education. Here again, the experience of the microcomputer software industry may be instructive. The software industry has recognized that the battle against piracy and unauthorized copying must include the achievement of greater public understanding of the rights of authors and copyright proprietors to control reproduction and distribution of their works. Education is as much a weapon in the arsenal of copyright protection as are enforcement litigation, legislative improvements, and technological research. The extensive advertising and public affairs efforts of the software industry, and of other groups of copyright proprietors, seem to have made some inroads in recent years. The trade press reports a greater awareness on the part of at least some users of the criteria for accepta-

³⁶ Id. at 8.

³⁷ Oman, The Compulsory License Redux: Will It Survive in a Changing Marketplace?, 5 CARDOZO ART. & ENT. L.J. 37 (1986).

³⁸ Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417 (1984).

³⁹ See COPYRIGHT ANNUAL REPORT, supra note 28, at 8.

⁴⁰ H.R. 1384, 100th Cong., 1st Sess. (1987).

⁴¹ Id.

ble copyright protection, and a greater willingness to work with proprietors to meet legitimate needs without resorting to illegal self-help. The course of Congressional hearings on home taping and related issues has, I hope, made some contribution to this educational effort, even though little legislation has resulted.

But there is a long way to go. At the request of the Subcommittee on Patents, Copyrights and Trademarks, the Congressional Office of Technology Assessment (OTA) recently commissioned a public survey on attitudes toward intellectual property.42 The results, summarized in OTA's valuable report, Intellectual Property Rights in an Age of Electronics and Information, 43 show that "the vast majority of the public finds acceptable-to the point that they would be willing to do it-some forms of unauthorized copying of copyrighted material."44

The educational efforts that are needed will surely take many forms and use many fora. But one opportunity that should not be overlooked is offered by the impending observances of the bicentennial of the Constitution, and the bicentennial of the first copyright laws that will follow in 1990. Of course, many interesting and important topics will be clamoring for attention under this rubric. But I hope that somewhere in all the public discussion of the priceless rights that the Constitution guarantees to all the American people, some attention will be focused on the only right that is mentioned as such in the original, unamended text of our primary charter. That is the "exclusive Right" that Article I, Section eight, clause eight, authorizes the Congress to secure "for limited Times to Authors." Copyright is the original constitutional right and there can be no better time than the Constitution's bicentennial to reflect on how, "to promote the Progress of Science and useful Arts"46 that we may more faithfully secure

THE EQUAL OPPORTUNITY DOCTRINE: THE BROADCAST EXECUTIVE WHO CAMPAIGNS FOR POLITICAL OFFICE MAKES HIS OWN STRANGE BEDFELLOW

I. INTRODUCTION

The equal opportunity doctrine1 exists both to encourage and regulate the use of publicly-licensed broadcasting facilities by political candidates.2 The Federal Communications Commission's (FCC) policy of encouraging political broadcasting serves the democratic process by educating voters.3 Regulation,4 on the

1 See The Communications Act of 1934, 47 U.S.C. § 315(a) (1982) which states: If any licensee shall permit any person who is a legally qualified candidate for any public office to use a broadcasting station, he shall afford equal opportunities to all other such candidates for that office in the use of such

broadcasting station: Provided, That such licensee shall have no power of censorship over the material broadcast under the provisions of this section. No obligation is imposed under this subsection upon any licensee to allow the use of its station by any such candidate. Appearance by a legally qualified candidate on any-

(1) bona fide newscast,

(2) bona fide news interview.

(3) bona fide news documentary (if the appearance of the candidate is incidental to the presentation of the subject or subjects covered by the news

documentary), or

(4) on-the-spot coverage of bona fide news events (including but not limited to political conventions and activities incidental thereto), shall not be deemed to be use of a broadcasting station within the meaning of this subsection. Nothing in the foregoing sentence shall be construed as relieving broadcasters, in connection with the presentation of newscasts, news interviews, new documentaries, and on-the-spot coverage of news events, from the obligation imposed upon them under this chapter to operate in the public interest and to afford reasonable opportunity for the discussion of conflicting views on issues of public importance.

Id. [hereinafter section 315]

Political Primer 1984, 100 F.C.C.2d 1476, paras. 1-2 at 1476-77 [hereinafter Polit-

3 "[T]he presentation of political broadcasts, while only one of the many elements of service to the public . . . is an important facet, deserving the licensee's closest attention, because of the contribution broadcasting can thus make to an informed electorate-in turn so vital to the proper functioning of our Republic." In re Licensee Responsibility as to Political Broadcasts, 15 F.C.C.2d 94 (1968) (citations omitted).

The equal time rule is meant to facilitate political debate through the media, and requires broadcasters permitting a legally qualified candidate for public office to use its facilities to afford equal time to all other candidates for that office." KVUE, Inc. v. Austin Broadcasting Corp., 709 F.2d 922, 932 n.33 (5th Cir. 1983), aff 'd sub nom. Texas v.

KVUE-TV, Inc., 465 U.S. 1092 (1984) (citations omitted).

The regulated party is not the candidate but the broadcast licensee. The licensee has the power to permit or deny access before any challenge is made. 47 U.S.C.

(a) The Commission may revoke any station license or construction permit-

⁴² Intellectual Property Summary, supra note 35.

⁴⁴ Id. at 22.

⁴⁵ U.S. CONST. art. I, § 8, cl. 8.