International Digital Publishing and Territorial Copyright: Is the European Union Letting Infringers Slip Through Its "Nets?"

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INTERNATIONAL DIGITAL PUBLISHING
AND TERRITORIAL COPYRIGHT: IS THE
EUROPEAN UNION LETTING
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Digital publishing, the process of distributing works of
authorship on computer networks, has drawn mixed reactions
in the traditional media it currently supplements and may one
day replace. Commentators and journalists have both hailed
online circulation as the most important innovation since
Gutenberg's press and condemned computer networks as cata-
lysts of social disintegration. One statement about computer
networks meets unanimous acceptance: they comprise the
world's fastest growing and least regulated market. The di-
verse works circulated on the “nets” share two characteristics:
eligibility for copyright protection and special vulnerability to
piracy. Any idea capable of expression in written, graphic,
audio or video form can be circulated on a network, and any

1. Efforts such as Project Gutenberg, the Dante Project, and Online Book
Initiative aim to distribute public domain classics in digital form. PAUL GILSTER,
THE INTERNET NAVIGATOR 281-99 (2d ed., 1994). Michael Hart, the founder of
Project Gutenberg, has compared the cost reduction and resulting broader access to
the difference between hand-illuminated books and those mass-produced by the
first printing press. Id. at 282.

2. See John Schwartz, Toward a New Game Plan for the Internet in the
Workplace, WASH. POST, Mar. 20, 1995, (Business), at 25 (quoting Clifford Stoll,
author of Silicon Snake Oil: Second Thoughts on the Information Superhighway, as
worrying that the Internet distracts users from more useful and creative pursuits).

3. See, e.g., George L. Graff & Joel A. Goldberg, Computer Works Gain New
GATT Protection, NAT'L L.J., Mar. 6, 1995, at C9 (calculating that American soft-
ware publishers lose $7 to $12 billion annually to unauthorized copying in the
global market, and that piracy of other intellectual property costs American rights
owners $60 billion per year); Paul Karon, Online Services Push the Envelope on
Copyright Issue, L.A. TIMES, May 4, 1994, at D4 (quoting legal expert David
Nimmer as receiving requests from “[a] lot of people . . . asking [him] how they
can go to market without falling afoul of other copyrights.”).
expression posted on the net can be copied without payment or permission by downloading to a disk in a user's computer.\textsuperscript{4} The resulting confusion assumes global proportions when intellectual property is bought, sold, copied, and shared over international computer networks. While these exchanges take place in a "virtual reality" unbounded by physical borders, they can have serious consequences for real-world rights holders. These problems are compounded by the fact that territorial copyright has not yet been modified to accommodate the electronic transmission of works in the transborder digital market.

A recent incident on the Internet, a network linking computer networks worldwide, illustrates the gap between territorial law and electronic publishing. Science fiction author William Gibson created a multimedia work entitled \textit{Agrippa (A Book of the Dead)} and retailed it on computer disks. He encrypted the story in a code that, like many computer viruses, was designed to erase the onscreen text immediately after the first reading.\textsuperscript{5} However, "Internauts" using Internet branches in the United States and Great Britain soon cracked the code and learned how to copy the disk so that the story remained intact.\textsuperscript{6} They then distributed Gibson's copyrighted work to electronic bulletin boards from which it could be downloaded at no cost. The infringement's unprecedented speed and international scope, combined with the network users' relative anonymity, made locating the perpetrators virtually impossible. Identifying every contributory infringer who downloaded the work was similarly impractical. Indeed, attempting to separate innocent infringers from the others would be futile without a mechanism for determining if and when Gibson's copyright notice had been removed.\textsuperscript{7} A single infringement rapidly be-

\textsuperscript{4} See Thomas Dreier, Copyright Digitized: Philosophical Impacts and Practical Implications for Information Exchange in Digital Networks 4-5 (Mar. 31-Apr. 2, 1993) (unpublished paper presented at WIPO Worldwide Symposium on the Impact of Digital Technology on Copyright and Neighboring Rights, Harvard University, on file with the \textit{Brooklyn Journal of International Law}).

\textsuperscript{5} Gerald Jonas, \textit{The Disappearing $2,000 Book}, N.Y. TIMES, Aug. 29, 1993, §7 (Book Review), at 12. Accompanied by a set of limited edition etchings printed in ink that wiped off the page when touched, the ephemeral work was offered to collectors at a substantial price.

\textsuperscript{6} Testimony of David H. Rothman, Writer, Before the National Information Infrastructure Task Force Working Group on Intellectual Property 2 (Nov. 18, 1993) (on file with the \textit{Brooklyn Journal of International Law}).

\textsuperscript{7} \textit{Id.} In his testimony, Mr. Rothman emphasized this point by displaying his
came world-wide appropriation. Although Gibson did not pursue this unauthorized international distribution, other rights holders are beginning to take legal action to define their interests in electronic media. These copyright owners recognize the immense market awaiting their products and the danger that infringers might reach that market first with illegal reproductions of copyrighted works.

The majority of nations with access to computer networks adhere to the Berne Convention for the Protection of Literary and Artistic Works. The Berne Convention permits member nations to implement their treaty obligations either by incorporating the Convention directly into national law or by promulgating national laws stating which provisions of the Convention will be recognized. In countries adopting the treaty into national law, additional implementing laws may be needed to render Convention provisions applicable to the member nation's citizens. Residents rely on national laws that have

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8. Two pending New York lawsuits, one involving musical compositions appearing on computer bulletin boards and one dealing with newspaper articles resold to online services, target the infringements made possible by new technologies. See Michael I. Rudell, Rights Problems Posed by Multimedia, N.Y. L.J., Apr. 1, 1994, at 3 (140 music publishers filed a complaint stating that the CompuServe network knowingly permitted some 690 acts of unauthorized downloading); Rosalind Resnick, Writers, Data Bases Do Battle, NAT'L L.J., Mar. 7, 1994, at 1 (journalists represented by the National Writers Union alleged copyright infringement and breach of contract when their paychecks were printed with a waiver clause so that endorsing the back meant signing away electronic publishing rights). See also Playboy Enterprises, Inc. v. Frena, 839 F. Supp. 1552 (M.D. Fla. 1993) (computer bulletin board operator infringed magazine’s copyrights in photographs when he made unauthorized copies available to network subscribers).

9. Berne Convention for the Protection of Literary and Artistic Works, Sept. 9, 1886, revised at Paris, July 24, 1971, S. TREATY DOC. No. 27, 99th Cong. 2d Sess. 37 (1986), 828 U.N.T.S. 221 [hereinafter Berne Convention]. Some eighty nations are currently parties to the treaty, including all the members of the European Union (Belgium, Denmark, France, Germany, Great Britain, Greece, Italy, Ireland, Luxembourg, the Netherlands, Portugal, and Spain). Once conspicuous by its absence, China has recently joined, as have several of the emerging Baltic republics, and Russia is negotiating to become a member. See Jean-François Verstrynge, The Spring 1993 Horace S. Manges Lecture-The European Commission’s Direction on Copyright and Neighboring Rights: Toward the Regime of the Twenty-First Century, 17 COLUM.-VLA J.L. & ARTS 187, 198 (1993).


11. Exceptions to this rule are Berne Convention provisions whose plain mean-
incorporated selected provisions of the Convention, rather than on the Convention itself.\textsuperscript{12} Given the importance of national law in implementing the agreement, copyright in the European Union remains primarily territorial with the Berne Convention merely providing a minimum level of protection.\textsuperscript{13}

The \textit{Agrippa} episode demonstrated that while computer networks defy the Union's localized limits, application of territorial copyright is necessary to ensure that authors will continue to offer their works on the digital market.\textsuperscript{14} At the very least, applying the Berne minima to copyrighted materials distributed on computer networks would place digital authors' rights on par with those of their hard-copy counterparts. In so doing, however, other considerations of global law and policy must be weighed.

The Berne Convention functions in tandem not only with national law, but with other multinational agreements. The most notable of these is the treaty unifying the European Union.\textsuperscript{15} This treaty's main goal is the creation of a common market through which both tangible and intangible goods may move freely.\textsuperscript{16} The tensions between the copyright monopoly
and the free flow of goods can translate into conflicts between
the European Union treaties, the Berne Convention, and mem-
ber nations' domestic law. Courts have struck an uneasy bal-
ance between authors' rights and market pressures. As a rule,
the European Union treaties cannot be construed to destroy
the national grant of intellectual property rights. Yet, once
granted, these rights cannot be exercised in a manner that
interferes with the European Union treaties. Once a court
finds an impermissible use of copyright, it may determine that
the treaties prevent the exercise of national rights—including
those stemming from the Berne Convention. This fine line
between national grants and individual exercises of intellectual
property rights blurs quickly in the digital market. Compounding
the issue, neither the Berne Convention nor the national
laws have yet defined the substantive rights and procedural
rules applicable to computerized distribution.

Just as the law of land and chattels evolved to fit intangi-
ble "goods," traditional intellectual property law should also be
modified to regulate the distribution of these goods over com-
puter networks. This Note addresses some international di-
mensions of electronic publishing, focusing on the protection
accorded traditional works of authorship such as literary

17. See Herman C. Jehoram et al., The Law of the E.E.C. and Copyright in 1
INTERNATIONAL COPYRIGHT LAW AND PRACTICE § 2([1b], at 12 (Melville B. Nimmer
& Paul E. Geller eds., 1993).

485, [1991] 4 C.M.L.R. 566 (Ct. First Instance); Case T-70/89, British Broadcasting
575, [1991] 4 C.M.L.R. 775 (Ct. First Instance) (connected cases holding that na-
tional copyrights were subordinated to the EEC Treaty when the rights were ma-
ipulated to abuse a dominant market position). These so-called Magill cases are
currently on appeal to the European Court of Justice. A broad affirmation could
weaken authors' ability under national law to enjoin third parties' distribution of
pirated copies. See infra notes 107-108 and accompanying text.

a general principle, the EEC Treaty creates a legal system separate from national
law—a system by which member nations agree to be bound as a condition of entry
to the Union).

20. As in the United States, the term "literary works" has been expanded to
the Legal Protection of Computer Programs, art. 1, 1991 O.J. (L 122) 42, 44 (rec-
ognizing the human effort required to produce computer programs and granting
them copyright protection as literary works within the meaning of the Berne Con-
and graphic works as well as musical compositions. Part I describes the Maastricht Treaty on European Union and the European Community directives governing telecommunications. Part II focuses on competition law, especially the circumstances under which an author “exhausts” rights in a work, and contends that the nature of online works requires that they be treated differently than physical goods under the competition rules. This Part considers judicial views on exclusive and collective licensing as representative of tensions between technological advances and European Union legal tradition. In light of this tradition, Part III discusses the need to redefine key provisions of the Berne Convention for the digital era. Part IV concludes that regulations for the nets should apply the European Union treaties and the Berne Convention with a view to keeping the electronic publishing market as fluid as the free market of ideas it mirrors.

I. THE EUROPEAN UNION'S EVOLVING TECHNOLOGICAL AND LEGAL INFRASTRUCTURES

Like the European Union itself, computer networks cut across physical, political, and cultural lines. Second only to the United States as a consumer of telecommunications services and information technology, the European Union has recognized the potential benefits of computer networks for cultural and economic unification. Thus, the Treaty of Maastricht signed in 1992 called for the newly created European Union to lay the groundwork for a pan-European telecommunications “infrastructure.” In spite of this mandate, however, European network use is not yet as extensive as that in the United

(Defining literary works as those “expressed in words, numbers, or other verbal or numerical symbols or indicia, regardless of the nature of the material objects . . . in which they are embodied.”)


22. See supra note 14 and accompanying text.

23. Treaty on European Union, supra note 16, arts. 129b-d, at 25. One hotly contested issue is whether the term “infrastructure” means the actual wires connecting the system or also services such as bulletin boards and electronic mail. Suzanne Perry, Council to Debate Postal, Telecommunications Service Texts, Reuter European Community Report, Dec. 6, 1993, available in LEXIS, Europe Library, REUEC File.
States. Indeed, the technology of the most advanced countries such as France, Germany and Britain, is currently one to one-and-a-half years behind that of the United States. In a market where a new generation of products appears every six or seven months, lagging two to three cycles behind severely impairs market competitiveness.

Even within the European Union disparity exists between member nations’ access to technology. In Italy, for example, many businesses use personal computers but network connections between regional enclaves are rare. The difficulty of setting up such connections in Italy and throughout the Union is exacerbated by entrenched public monopolies, which can raise the cost of installing or leasing a telecommunications link up to five times more than the price of a comparable service in the United States. Some state agencies demand that the user obtain their permission for such activity—a process which can raise the costs of basic hardware such as modems and two-way telephone jacks.

Despite these obstacles, user demand has grown exponentially. Experts estimate a growth of up to three billion dollars in the European online service market over the next five years. Access to computer networks is a matter of particular concern in the academic and scientific communities. Several networks are now in operation, most notably RARE, an acronym for Reseaux Associes pour la Recherche Europeene (Networks Associated for European Research). RARE connects about forty academic networks in a manner similar to that of the U.S.-based Internet. RARE was also responsible for initiating EuropaNET, another transborder “network of networks.” The individual nets themselves include Britain’s Joint

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25. See generally PAUL CARROLL, BIG BLUES: THE UNMAKING OF IBM (1993) (detailing how over-bureaucratizing and giving insufficient attention to research and development caused the computer corporation’s downfall).
29. Knit Your Own Superhighway, supra note 21, at 101-02.
30. As of this writing, the Internet connects some twenty million users to twenty thousand subsidiary networks in 140 countries. David Bottoms, The ‘Net’ Gets Raised, INDUSTRY WK., May 16, 1994, at 40.
Academic Network (JANET), Germany's DFN and DNET, and France's FNET, ARISTOTE, and REUNIR. 31 There are also transborder networks, such as USENET and BITNET, that allow scientists at universities throughout the European Union to exchange electronic mail and access paperless journals. 32 Business and individual consumers also recognize the efficiency of what commentators have dubbed the "Infobahn." 33 One of the most popular applications, the World Wide Web, allows users to navigate Internet sites by means of a point-and-click graphical interface. 34 The number of linked hypertext documents available to users worldwide has grown to several thousand since the Web's creation in 1992, 35 supporting ventures from online journals 36 to virtual malls. 37

Computer network usage in the European Union has risen sufficiently to cause concern about safeguarding copyrights, and will continue to do so in the years ahead. 38 At the macrolevel, the European Union has every incentive to clarify copyright policy on new technologies and to harmonize its own standards so as to improve its position in the world digital market. Capitalizing on these new opportunities will require a two-pronged effort of technical initiative and legal harmonization. Just as networked computers rely on "protocols" to translate each others' communications, 39 human users are begin-

32. Id. at 18.
33. William Safire, On Language: Footprints on the Infobahn, N.Y. TIMES, Apr. 17, 1994, § 6 (Magazine), at 20. Although first applied to United States Vice President Al Gore's plan for an "information superhighway," the term seems particularly appropriate to the European setting.
34. The Web itself is of European origin, having been developed at CERN, the European Particle Physics Institute in Geneva, Switzerland. Richard W. Wiggins, Webolution, INTERNET WORLD, Apr. 1995, at 33, 36.
35. Id. at 36-38.
37. Aaron Weiss, Hot Spots, INTERNET WORLD, Apr. 1995, at 78 (describing offerings such as the Internet Shopkeeper at http://www.ip.net/shops.html and Main Street at Downtown Anywhere at http://www.awa.com).
38. The potential for development has prompted German media giant Bertelsmann A.G. to embark on a joint venture with Internet services provider America Online, Inc. An Online Deal for Bertelsmann, supra note 28, at D4.
39. See generally, GILSTER, supra note 1, at 16-17 (discussing the role of protocol within the "metanetwork" of the Internet). The European Union, too, may be seen as a metanetwork of individual cultures, each of which has its own legal
ning to develop rules for online interaction. Members of the electronic and economic communities must cooperate to devise viable standards rather than raising protectionist barriers, for such restraints are irrelevant in a digital market. A brief overview of the European Union treaties and related intellectual property law is helpful in situating this effort in its international context.

A. Treaties Establishing the European Union

The Treaty on European Union, signed in Maastricht in 1992, created several institutions responsible for enacting and interpreting European Union law. The four most important institutions are the Council of Ministers, the Commission, the Court of Justice and the European Parliament. The Council is made up of representatives from each member nation who have the authority to bind their countries to legal and political agreements. The Council meets regularly in “formations” grouped by policy area, such as the General Affairs Council or the Internal Market Council, and members’ votes are weighted according to the population of the country which they represent. The Treaty also grants the Council sweeping powers of decision-making and implementation. Some of these powers are shared with the Commission, whose members are charged with representing the interests of the Union as a whole. Member states’ representation is proportional to population. Among the many elements of the Commission’s complex role is the power to implement 1992 Treaty provisions and to hand down opinions giving guidance to member nations who have violated these laws. The Commission may investi-
gate and decide upon complaints in areas such as allegations of unfair competition. The Commission is subject to review by the Court of First Instance, whose decisions can in turn be appealed to the Court of Justice. This court is the highest in the Union and also has jurisdiction over questions requiring interpretation of the 1992 Treaty.48

Each entity participates in making the supranational statutory and case law that governs interaction between Union members. While Union law as codified in the 1992 Treaty is recognized as the supreme law of the land,49 the Council and Commission may make law through regulations, directives, and decisions.50 Regulations are binding in their entirety and applicable to all member nations; directives are statements of a legislative goal binding only nations to which they are addressed and leaving the choice of "form and means" to those nations' authorities; and decisions apply to the designated nations without explicitly leaving them the right to set procedure.51

B. The Telecommunications Directives

Pursuant to these powers, the European Union has begun to lay the technological and legal foundations for the networks of the future. Telephone conversations and radio and television broadcasts are the only modes of communication that approach the nets' speed and territorial diversity. Indeed, communication between computers happens by means of devices called modulating demodulators or "modems," which translate computer data into electronic impulses that pass through the telephone wires. Moreover, many of the corporate vendors currently providing telecommunications services are seeking to develop the computer technology to help pave the "Infobahn."52 The economic and policy concerns informing recent telecommunica-

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49. WYATT & DASHWOOD, supra note 42, at 57.
50. EEC TREATY art. 189.
51. Id.
tions directives provide insights into the European Union's expectations of its new technologies.

Union law-making institutions have concentrated on building a policy framework rather than enunciating prescriptive measures. To this end the Commission has issued a Green Paper and the Council a Directive. In addition to the usual problems of convincing member nations to align their separate interests, proponents of harmonizing the law face opposition from the public monopolies controlling telecommunications services in many countries. The Commission's Green Paper attempted to compromise between the interests of the entrenched public monopolies and the developing Union market. To avoid withdrawing the power conferred by state monopolies, the Green Paper endorsed "re-regulation" as opposed to complete deregulation. Under its program, the state-run operators were to retain control over "basic services," while "value-added services" were to be opened to all providers. The only flaw in this approach was the Green Paper's vagueness in defining its terms. Commentators tend to agree that basic services include maintenance of the wires transporting the data and that value-added services comprise such items as electronic mail and online databases. However, this dichotomy collapses with technology's advance. In a market developing so rapidly, where

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56. Austin, supra note 53, at 98.
57. Green Paper on Telecommunications, supra note 54, at 36.
58. Austin, supra note 53, at 105 n.32.
today’s extras soon become tomorrow’s essentials, allowing state-run monopolies control over “basic services” can only lead to counterproductive arguments over the term’s meaning and a corresponding reduction in available utilities. 59

When the Green Paper’s proposals were enacted in a “Services Directive” reaffirming the public operators’ control over basic services, a need to balance this control became clear. Accordingly, the Council adopted the Directive for Open Network Provision in 1990.60 The Open Network Directive sought to liberalize the market by ensuring that state operators could not discriminate against private providers. It promulgated a process for setting uniform technical standards so that new contenders would not be forced to invent different products for each country. 61 The Directive also demanded that the state monopolies publish their own standards for conditions like transmission quality and maintenance arrangements so that independent providers would be well-informed enough to offer competing services. 62 A final condition advocated billing customers on an objective “cost-oriented” basis, cautioning the monopolies against imposing protective tariffs. Despite this important step toward market transparency, the Directive ultimately left the task of fixing actual rates to the individual nations. 63

The regulatory framework sketched in the two telecommunications directives was given substance by the Council Directive on the Application of Open Network Provision to Leased Lines. 64 Leased lines connect users with information stored in computer databases. Generally, the state monopolies lease the circuits to private providers, who then

59. The Green Paper itself concedes that advances in network technology and the trend towards integration of services have “led to a blurring of traditional boundaries between services. There is at present no agreed definition of ‘basic services’ within the Community . . . .” Green Paper on Telecommunications, supra note 55, at 41.
61. Austin, supra note 53, at 111.
63. Id.
offer the databases to subscribers. As more consumers turn to computer networks for information and recreation, the probability increases that they will bypass the more costly state-run services in favor of those available on leased lines. Again, the European Union legislature effected a compromise between the consumers' and the monopolies' conflicting interests. Under the Open Network Provision Directive the government operators must ensure that a certain number of leased lines will be subject to the Open Network standards of managed competition, while all other lines can be leased without these restrictions. This gradual deregulation bodes well for competition among computer network operators. By emphasizing system interoperability and cost-based pricing, the Commission and Council have laid the foundations for a dynamic industry.

The European Union began to build an international infrastructure on these foundations during a Brussels conference between the world's leading industrial nations. Members of the "G7" agreed to cooperate on eleven international projects ranging from linking national emergency systems to creating global educational networks. Simultaneously, the European telecommunications industry is undergoing privatization in an effort to encourage competition and reduce the currently high costs of access. The participants in these global networking projects have recognized that further copyright harmonization is needed for the global information infrastructure's commercial success. Both the emerging Common Market and the developing networks must resolve several tensions between the free flow of goods and the proprietary rights in intellectual property that ensure these goods' continued production.

65. See Austin, supra note 53.
67. The 1991 Directive on the Legal Protection of Computer Programs describes interoperability as the "functional interconnection and interaction" defined as "the ability to exchange information and mutually to use the information which has been exchanged . . . ." Council Directive 91/250/EEC, supra note 20, at 43.
69. Jackson, supra note 27, at 80-81.
II. THINKING LOCALLY, ACTING GLOBALLY: THE DANGERS OF APPLYING TERRITORIAL COPYRIGHT TO INTERNATIONAL NETWORKS

In addition to prescribing the process by which laws are made, the Treaty Establishing the European Community directly regulates member nations’ copyright law by virtue of its allusions to “industrial and commercial property.” Courts have construed this phrase broadly, applying it to literary and artistic works as well as the traditional subjects of patents and trademarks. Copyright’s territorial nature means that rights in the same work can vary from country to country within the Union. To a certain degree, the Treaty reaffirms this territoriality with its insistence that the Treaty “shall in no way prejudice the system existing in Member States governing the system of property ownership.” The European Court of Justice commented on the differences between national intellectual property rights in a frequently cited patent case, warning that “the variations between the different legislative systems on this subject are capable of creating obstacles both to the free movement of the [protected] products and to competition within the common market.” To prevent national differences from interfering with the establishment of a common market, the Treaty on European Union specifies that Union law will control the resolution of most such conflicts. In general, the European Community Treaty supersedes agreements negotiated before it came into force, including the Berne Convention.

71. EEC TREATY art. 36.
73. Jehoram et al., supra note 17, § 3[2], at 30.
74. EEC TREATY art. 222; see also Ronald E. Myrick, Influences Affecting the Licensing of Rights in a Unitary European Market, 4 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 81 (1993).
76. EEC TREATY art. 234.
77. Id.; Case 10/61, Commission v. Italian Republic, 1962 E.C.R. 1, [1962] 1 C.M.L.R. 187 (new obligations arising under the Treaty Establishing the European Community override conflicting rights held under an earlier agreement, limiting
A. The Outer Limits of Territorial Copyright

Although the Berne Convention allows rights holders to invoke extra protection under the law of their nation of origin, Union case law precludes them from exercising the national-law rights in such a way as to hinder the free flow of goods between Union members. This rule originated in the case of Deutsche Grammophon Gesellschaft mbH v. Metro-SB-Grossmärkte GmbH & Co. KG,78 which addressed tensions between German law and the Treaty Establishing the European Community. The Deutsche Grammophon Record company sold records in Germany and France through a subsidiary, Polydor. A rival record distributor, Metro, bought records from Polydor and resold them in Germany at a price well below plaintiffs.79 Without invalidating the German right entirely or instructing member nations on the proper scope of exclusive distribution rights, the European Court of Justice held that allowing the plaintiff to block the sale would "be in conflict with the provisions prescribing the free flow of products within the common market."80

The doctrine was refined in another case involving record distributors’ German rights. In Musik-Vetrieb Membran GmbH v. GEMA,81 the copyright collective GEMA claimed that a record company had violated owners' right to collect German royalties by importing records and cassettes into Germany from other member nations—even though the copyright owners had agreed to the foreign sales. France, as one of the countries from which the records were imported, intervened in favor of GEMA with an argument that the composers had a moral right to enjoin actions they believed were damaging to their reputations.82 The European Court rejected this argument, noting that the rights holders had agreed to the sale of their recordings in the member nations from which they were imported. The court reasoned that GEMA’s members could not invoke a German royalty right on works first sold in other countries once they had contractually agreed to reap the profits of inter-

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national marketing. The Court concluded that enforcing such a right would create the equivalent of a restrictive tariff on record and cassette sales and would thus impede international commerce.\(^3\)

The GEMA decision arrived at its result by applying the "exhaustion of rights" principle. Under European Union law, national rights in intellectual property are "exhausted" once the author or transferee lawfully markets the work in another member nation. Thus, the rights owner can no longer appeal to the law of his or her country for remedies against re-importation of the goods at a lower price. However, national law differs from European Union law in that it provides a remedy for a rights holder in this situation.\(^4\) The European Union view prevails when enforcing national rights would threaten the free market.\(^5\)


Exhaustion of authors' national rights under the Treaty on European Union often facilitates an alternate system of distributing goods known as parallel importation. In a typical situation, goods retailed lawfully in an exporting country are also imported into another country, where they are sold at a lower price.\(^6\) A distributor in this second country buys up the

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84. Wyatt & Dashwood, supra note 42, at 575-76.
85. Exceptions to the rule are enumerated in Article 36 of the EEC Treaty, which allows trade restrictions in the form of enforcing national copyrights as long as the rights are not "arbitrary discrimination or a disguised restriction on trade between Member States." EEC Treaty art. 36. Moreover, restrictions must be necessary to the protection of a valid copyright. Id. (allowing certain barriers to trade if "justified on grounds of . . . the protection of industrial and commercial property.").

The European Court of Justice has allowed a British national to enjoin "bootlegged" recordings under German law. Normally, this right is not available to citizens of countries other than Germany. C-92/92, Collins V. Imrat Handelsgesellschaft mbH, [1993] 3 C.M.L.R. 773. However, the Court of Justice reasoned that preventing the plaintiff from enforcing his rights under the German copyright law simply because he was British would be tantamount to condoning discrimination on the grounds of nationality. Such discrimination would contravene Article 7 of the Treaty on European Union. See EEC Treaty art. 7. Accordingly, the court granted performing artists the right to enjoin unauthorized copies of their performances under the law of the country in which these copies are made or distributed. Collins, [1993] 3 C.M.L.R. at 793.
goods, re-imports them into the country of origin, and sells them there for less than the going rate. Even after absorbing shipping costs, tariffs, and related fees, parallel importers can realize substantial gains.

Owners of intellectual property rights oppose parallel importation because their right to exploit copies dwindles in value when cheaper copies flood the market. Yet this traffic in resold goods is not per se illegal, as reflected in its designation as a “grey” rather than a “black” market. Indeed, European Union courts have repeatedly prioritized consumers’ interest in obtaining goods at a lower price over rights holders’ ability to maximize their income from the sale of copies. Nevertheless, the ease with which intellectual property can be transported and copied by means of computer networks suggests a need to reconsider this balance of benefits and burdens.

2. Parallel Importation in the Digital Market

In the digital market, works of authorship are among the goods “imported” and “exported” over transborder computer links. These goods defy hypostatization even more than traditional forms of intellectual property, but are equally worthy of protection. The exhaustion doctrine should be applied sparingly in this market because digital goods are easier to reroute from one country to another as parallel imports than are tangible works. Copyrighted works stored in a database located in one country could be transmitted to a computer located in a country with less stringent or nonexistent copyright controls. The works could then be retransmitted to a purchaser in a

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87. See, e.g., Joined Cases 55 & 57/80, Musik-Vetrieb Membran GmbH v. GEMA, 1981 E.C.R. 147, [1981] 2 C.M.L.R. 44. In this case, the parallel importer’s price was less than the minimum imposed by the government.
88. See generally ROTHNIE, supra note 86.
89. Jehoram et al., supra note 17, § 2(1)c[i], at 14.
91. See Burk, supra note 31.
third country or in the nation of origin. The entire process could be automated in a manner analogous to a “dial-back” service offered by some telephone companies. This practice allows a customer in one country to call an operator in another country, who then reroutes the call through the second country’s less expensive telephone lines. Works appearing on a net could similarly be rerouted using modems. This type of transfer would appeal to “have-not” nations struggling to catch up to the world’s technological “haves.” Receiving and processing data from more developed nations lets the underdeveloped countries collect revenues and have access to information.

In the digital market, application of the exhaustion doctrine would preclude the owner of the work from enforcing his or her rights under the country of origin’s law. The recipient of the second transfer can thus download the work from the foreign database without paying the full use fee. A digital greymarket would arise, with parallel importers trafficking in data just as they currently resell copyrighted and trademarked products.

While the parallel importation of physical goods is tolerated on the ground that it facilitates consumers’ access to the goods, the digital market presents a very different predicament. When intellectual property is embodied only in physical goods, consumer access is limited by the goods’ finite number and by the time and money necessary to ship them from manufacturer to retailer. In contrast, works of authorship present on a network can be transmitted rapidly enough and copied easily enough to obviate comparisons to the physical market. Consumers’ dubious right to pay less for greymarket products need no longer be safeguarded when works can be downloaded and retrieved at minimal cost. Indeed, permitting authors to enforce their copyrights in the limited context of the digital

92. See Austin, supra note 53.

93. See Alexander Gordeyev, Copyright Organizations Urge Piracy Crackdown, MOSCOW TIMES, (Business), June 24, 1994, at 11 (Moscow head of Business Software Alliance estimating that over ninety-five percent of software in the former Soviet Union is illegally copied). For an example closer to home, see ROBERT A. GORMAN & JANE C. GINSBURG, COPYRIGHT FOR THE NINETIES 789 (3d ed. 1989) (reporting that the lack of protection for foreign authors in the newly freed American colonies created high demand for European works).

greymarket would ameliorate the imbalance, created by technological innovation, between rights holders' interests and potential infringers' new capabilities. Such a policy would reaffirm the rationale of copyright itself: encouraging a steady stream of new works in all venues by vesting limited proprietary rights in authors. Where online networks are concerned, a free market of goods should not be encouraged at the expense of the free market of ideas.

B. Can Digital Authors Find Relief From Exhaustion?

Efforts to discourage the practice of parallel importing by enforcing intellectual property rights are only occasionally successful. However, Union-wide recognition of the limits of territorial copyright where new technologies are concerned has led to increased concern for copyright owners' interests. Courts and legislatures alike acknowledge the efforts involved in creating innovative types of intellectual property. Recent decisions reflect the tensions between rewarding the originators of digital works and ensuring public access to these works. Cases analyzing intellectual property licenses under Union competition law offer several possibilities for authors wishing to safeguard rights that would otherwise be exhausted once they choose to distribute a work on the Common Market.

One method for blocking parallel imports is an agreement between the rights owner and a distributor that splits copyright ownership along national lines. Under this type of arrangement, each party may enforce its rights under national law against parallel importers. Thus, an author in country A could contract with a database owner in country B to disseminate a work by means of a network in B. To ensure that the work would not then be resold to an offshore data haven, the author might attempt to condition an exclusive distribution right on the licensee's promise not to export the work. Howev-

95. See Dennis J. Karjala, Misappropriation as a Third Intellectual Property Paradigm, 94 COLUM. L. REV. 2594, 2595 (1994) (focusing on digital products' "vulnerability to misappropriation" as a type of market failure under the current intellectual property regime).

96. See, e.g., Green Paper on Copyright and the Challenge of Technology: Copyright Issues Requiring Immediate Action, COM(88)172 final at 18-94 (discussing threats posed by piracy).

97. ROTHNIE, supra note 86, at 394.
er, the European Commission would probably hold that such a provision restricted competition in violation of Article 85(1) of the Treaty on European Union.\textsuperscript{98}

By retaining the right to invoke territorial copyright laws against possible parallel importers, the author has effectively denied competitors the right to make the work available for a lower price in A.\textsuperscript{99} A user in A who wished to view or download the work would have to obtain it from a licensed database or network. Assuming the user’s computer can communicate with the licensed system, he or she would still have to pay a set fee for the transaction. Allowing a single licensee to control the price of network transactions prevents other networks and databases from offering works at competitive rates. Limiting efficient and reasonably priced user access to citizens of one country is inappropriate not only to the Common Market, but to a network system whose goal is to facilitate information sharing.

Nonetheless, the European Court of Justice has permitted territorial restrictions based on national law when a rights owner exploits the intellectual property product by means of a service as well as selling it embodied in a good. In *Coditel v. S.A. Ciné Vog Films (Coditel I)*,\textsuperscript{100} the Court upheld a license granting exclusive distribution rights in a film to a Belgian company.\textsuperscript{101} Cine Vog, the licensee, had promised not to permit television or cable broadcast of the film until forty months

\textsuperscript{98} See Joined Cases 56 & 58/64, Établissements Consten SARL v. Commission, 1966 E.C.R. 299, [1966] 5 C.M.L.R. 418 (applying the “layered analysis” to determine whether an agreement is acceptable under the competition rules, and held that a contract between a supplier and an exclusive distributor was unduly restrictive when it contained a promise that neither party would resell the goods outside their allotted “territories”).

\textsuperscript{99} It has been suggested that an exclusive distribution license alone does not violate Article 85, but that the addition of non-export provisions and emphasis on territorial ownership render the agreement collusive. See Case 56/65, Société Technique Minière v. Maschinenbau Ulm GmbH, 1966 E.C.R. 235, [1966] 5 C.M.L.R. 357 (exclusive distribution rights not denied when agreement did not contain export bans).


\textsuperscript{101} The case was affirmed on appeal in Case 262/81, Coditel SA v. Ciné-Vog Films SA (Coditel II), 1982 E.C.R. 3381, [1983] 1 C.M.L.R. 49. Although it remanded the case to the Belgian court for findings of fact on whether exclusive exhibition rights encouraged investment in films, the European Court of Justice stressed the need to stimulate financial support based on the nature of the product.
after the film was first released in Belgian movie theaters.\textsuperscript{102} Exclusive rights in the film were also granted to a German company without any comparable restrictions. Coditel, a Belgian cable company, taped the unrestricted German broadcast and aired the film for its own subscribers.\textsuperscript{103} In allowing Cine Vog to enforce its license, the Court recognized the need to protect intellectual property when the work in question could be presented to the public an infinite number of times and when the rights holder would not be able to exploit the work without considering the means of circulation at issue. With their ability to be copied and relayed from computer to computer, online copyrighted works meet the court’s first criterion. Furthermore, just as no reasonable rights owner would market a film without considering its prospects for television broadcasts, authors who create with computers must realize their machines’ potential for distribution. Restrictive licenses regarding electronically published works should be considered under the less stringent standard of \textit{Coditel I} and \textit{Coditel II}.

Some exclusive licenses encourage, rather than inhibit, the distribution of intellectual property.\textsuperscript{104} Limiting licensees’ rights by denying the exclusive license would discourage innovation by reducing the potential for exploiting new products. Potential investors in new technologies will be reluctant to commit their funds without the certainty that they will be able to recoup some of the profits, so an overly inflexible approach risks chilling technological development.\textsuperscript{105} Licensees might

\textsuperscript{103} \textit{Id.}
\textsuperscript{104} \textit{See} Case 258/78, L.C. Nungesser KG v. Commission, 1982 E.C.R. 2015, [1983] 1 C.M.L.R. 278. In deciding the validity of an exclusive open license, the European Court of Justice Observed:

\begin{quote}
\texttt{[A]}n exemption from the prohibition in Article 85(1) [of the EEC Treaty] may be granted in the case of any agreement between undertakings which contributes to improving the production of goods or to promoting technical progress, and which does not impose on the undertakings concerned restrictions which are not indispensable to the attainment of the objectives.
\end{quote}


\textsuperscript{105} \textit{See generally} Randolph W. Tritell, \textit{The Application of Block Exemptions to Intellectual Property Licensing in the European Community}, 5 J. PROPRIETARY RTS.
balk at investing in a product if their interests were not safeguarded from competition from other licensees or the licensor itself. In turn, the number of products on the market would decrease as potential licensees refused to support innovation.

To encourage investment in the creation and distribution of new types of intellectual property, the Commission exempts certain types of restrictive agreements, making them per se legal. These exemptions cover patents and know-how licensing, but their general principles are relevant to copyright licensing agreements. The patent licensing block exemptions allow the licensor and licensees to implement certain territorial restrictions. Permitted constraints include forbidding the licensor to exploit the licensed invention or grant licenses to others in a licensed territory for the patent’s duration. These restrictions permit a licensor to control the distribution of its product to some degree, but without granting a monopoly to one licensee. When extended to copyrighted works, these exemptions allow the rights holder to select an exclusive distributor, but not to condition that exclusivity on the distributor’s refusal to engage in parallel data importation. Likewise, a provision requiring the licensee to inform the licensor of infringements of intellectual property rights or help enforce those rights against third parties may contradict Article 85(1). A license will not fall under a block exemption, and will be held to impermissibly impede the free flow of goods, if it limits the class of customers the licensee may serve or forbids the licensee to sell the product in other licensees’ territories for more than five years. Finally, no license will be held valid which allows the parties to refuse to supply the product to

106. Id.
111. A party might be able to obtain an exemption by proving that the provision does not violate Art. 85(3) of the Treaty. See EEC TREATY art. 85(3). No record exists of a litigant satisfying this heavy burden of proof. Given the case law, it is unlikely that a digital rights holder could make a compelling policy argument in support of such a restriction.
European Union users who wish to market the product elsewhere within the Union.\textsuperscript{112} Applied to copyright, the block exemptions reinforce the exhaustion doctrine by preventing a rights owner from stopping parallel imports. The emergence of a digital greymarket in copyrighted works might demand reconsideration of these rules.\textsuperscript{113}

In contrast to restrictive territorial licensing, an author's or inventor's simple refusal to grant a license to a third party is not generally considered anticompetitive. No obligation exists to grant distribution rights to third parties, "even for a reasonable royalty."\textsuperscript{114} The author could thus retain the core of rights granted under national law by declining to license the work to a publisher. Before the advent of electronic publishing, this decision would have effectively precluded the author from exploiting the work by selling copies. In contrast, a digital author can propagate text, graphics, music, and video throughout the network without ever contracting with a third-party distributor.

However, a recently decided trio of cases might allow third parties to force an intellectual property proprietor to license copyrights.\textsuperscript{115} The "Magill cases" denied three broadcasting organizations the ability to prevent competitors from copying and selling lists of their television programs which was a right granted under national law. The broadcasters declined to license their copyrighted listing of television programs to the Magill Company, which sought to produce a comprehensive guide to all three sets of programs. In granting Magill the license, the Commission reasoned that the broadcasters had unfairly prevented a product from reaching consumers.\textsuperscript{116} The

\begin{footnotesize}
\begin{enumerate}
\item The refusal to restrict parallel importing in the patent context might ultimately make network technology more accessible and spur its harmonization within the European Community. Without the price discrepancies caused by unequal access, no motivation would exist to re-import copyrighted works at lower rates.
\item Case 238/87, AB Volvo v. Erik Veng (UK) Ltd., 1988 E.C.R. 6211, [1989] 4 C.M.L.R. 122 (design owner's unwillingness to grant a license for products incorporating the protected design was not an abuse of a dominant position).
\item Compounding the problem of distinguishing a grant of rights from an
\end{enumerate}
\end{footnotesize}
breadth of this holding is still uncertain as the case has been appealed to the European Court of Justice. If the Court affirms the Commission's result, database proprietors and even individual authors might be unable to block third parties from using their digitized works in competing, unauthorized products.

Given the fact that many online authors distribute their own works by electronic self-publishing rather than through licensees, it is to be hoped that the European Court makes a determination in favor of authors' rights. Copyright owners should be forced to license to third parties only if the rights holder has irrationally stopped a steady stream of goods on whose continued production the third party reasonably relied. Since authors do not produce intellectual property goods in large, consistent amounts, the Magill cases' rationale should at most be limited to licenses between database proprietors, network operators, or similar distributors. Individual authors might look to other licensing options to enforce their national rights and recoup royalties in a manner that comports with competition law.

C. Collective Licensing on the Networks

Collective licensing is one method which allows authors to receive royalties on the sale or performance of copies of their works. This type of licensing agreement was conceived to allow authors to exploit public performances of non-dramatic works. It remains the norm for situations like online dissemination in which so many copies are distributed that the individual author has difficulty enforcing his or her right. Under a collective licensing agreement, an authors' society issues one

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117. See, e.g., Case 311/84, Centre belge d'études de marché-télémarketing (CBEM) SA v. Compagnie luxembourgeoise de télédiffusion SA, 1985 E.C.R. 3261, 3279, [1986] 2 C.M.L.R. 558, 574 (company violated Article 86 by reserving a business opportunity which another company could easily have taken as “part of its activities on a neighboring but separate market . . . ”).

118. WORLD INTELLECTUAL PROPERTY ORGANIZATION, COLLECTIVE ADMINISTRATION OF COPYRIGHT AND NEIGHBORING RIGHTS 5 (1990) (observing that “with the ever newer waves of new technologies, the field in which individual exercise of rights is impossible or, at least, impractical, has been constantly and rapidly widened.”) [hereinafter WIPO].
license for all the works of its constituents. A member generally assigns the rights of public performance and mechanical reproduction to the collection society. In the digital context, these rights might encompass, although they should not be limited to, the ability to charge an individual user or distributor for viewing or downloading the work. The society is authorized to collect the proceeds from the license agreement and redistribute the moneys to the authors under a predetermined formula. Authors are thus empowered to enforce their economic rights in copies of their works. Consumers benefit as well since they may use a broader range of works without negotiating with individual authors.

Collectives also reduce the costs of monitoring the uses and collecting the authors' fees. These organizations are politically well-equipped to manage the digital rights of their author, composer, and artist members. Unlike other restrictive licensing schemes, the administration of copyrights by authors' collectives has been accepted by both the courts and the legislatures as compatible with European Union competi-

119. In this example, viewing a work onscreen may be analogized to a "public performance" and downloading it may be seen as a type of "mechanical reproduction."

120. This formula is usually based on considerations such as the type of work, the number of times it is used, and the length of the author's membership in the society. STANLEY M. BESEN & SHEILA N. KIRBY, COMPENSATING CREATORS OF INTELLECTUAL PROPERTY: COLLECTIVES THAT COLLECT 21 (1989).

121. WIPO, supra note 118, at 6.

122. See Case 402/85, Basset v. Société des Auteurs, Compositeurs, et Editeurs de Musique (SACEM), 1987 E.C.R. 1747, [1987] 3 C.M.L.R. 173 (national law allotting a percentage of a discotheque's gross receipts to a collection society in return for permission to play works from the collection society's repertoire was not an anticompetitive measure under Articles 30, 36, or 86 of the EC Treaty). Compare Broadcast Music, Inc., v. Columbia Broadcasting Services, Inc., 441 U.S. 1, 19 (1979) (recognizing collective licensing as a help rather than a hindrance to the free market since it reduced the costs of administering royalties and rewarded authors, furthering "the commerce anticipated by the Copyright Act and protected against restraint by the Sherman [Anti-Trust] Act . . . ").

123. See, e.g., Council Directive 93/83/EEC of 27 September 1993 on the Coordination of Certain Rules Concerning Copyright and Rights Related to Copyright Applicable to Satellite Broadcasting and Cable Retransmission, 1993 O.J. (L 248) 15 (permitting holders of rights in cross-border satellite broadcasting and cable transmission to transfer these rights to collection societies). This Directive is relevant both for its substance, due to the physical similarities between broadcast transmissions and computer networks, and for its form, since the law speaks to the necessity of remunerating authors who create in new media. Compare Broadcast Music, Inc., 441 U.S. at 15 (noting Congressional intent that collection societ-
tion law. Moreover, many nations explicitly recognize the collectives in their copyright statutes. While Union officials once debated whether allowing reciprocal collection arrangements between the societies would violate the competition rules, the difficulty of enforcing royalties in an expanding international market has promoted cooperation among collectives. Existing organizations could thus expand their current operations to include the tracking of digitally distributed works. The categories of works already administered by the European collection societies include several elements common to network distribution, most notably the right to store and retrieve graphic and textual works to and from databases. Among these rights there is also the right to receive royalties for the “home taping” of musical and audiovisual works, which closely resembles a right to profit from users’ “downloading”

**Footnotes**


125. See Case 395/87, Ministère public v. Tournier, 1989 E.C.R. 2521, [1991] 4 C.M.L.R. 248 (addressing the validity, under the competition rules, of a collective’s refusal to license its own repertory or that of another collective to a similar society in another country).

126. Artists’ societies have addressed the problems of royalty collection caused by large “satellite footprints” by paying fees to the collection society in the country sending the signal (the “up-link” country) but calculating the fees according to the size of the country receiving the transmission (the “down-link” country). The same approach could reduce the difficulties of collecting fees for a network that spans several nations. See William I. Hochberg, *Fishing in the Black Box: Developments in International Music Royalty Collecting*, 26 BEVERLY HILLS B. ASSN’ J. 114, 115 (1992).

127. In contrast to the collection societies’ analysis of random airwave samples, a tracking mechanism programmed into the networks and harmonized throughout the Community would yield a complete and accurate record of user transactions. See Nicholas E. Sciorra, Note, *Self-Help & Contributory Infringement: The Law and Legal Thought Behind a Little “Black-Box,”* 11 CARDOZO ARTS & ENT. L.J. 905 (1993) (discussing technological solutions in the context of video distribution). Computerized protection against network break-ins has been introduced in the form of a program entitled Security Administrator Tool for Analyzing Networks (Satan). Satan has been distributed globally over the Internet and termed a “promising tool” by industry analysts. Laurie Flynn, *Software That Pits Alarmists Against Devil’s Advocates*, N.Y. TIMES, March 12, 1995, at 11. However, the very accessibility of Satan has raised concerns that the software will be used to facilitate, rather than prevent security breaches. *Id.*
works from the text. With its prior experience, the European collectives are therefore uniquely competent to serve the growing digital market. National legislatures as well as the Union’s legislature must now demarcate the new elements added to copyright’s “bundle of rights” in a manner consistent with their international obligations.

III. THE BERNE CONVENTION AND COMPUTER NETWORKS’ CHALLENGE TO CONVENTIONAL WISDOM

While copyright within the European Union is limited by the laws of its member nations, these laws must meet a minimum standard of protection enunciated by the Berne Convention for the Protection of Literary and Artistic Property. Individual Union countries may choose to implement higher standards. The Berne Convention has been characterized as “essentially [a] choice-of-law treaty” because it offers a series of tests for determining different works’ status. For example, a work is protected if the country where it is first published is a party to the treaty. An unpublished work can claim the same protection if the country in which the author is domiciled is a party to the treaty. Although both types of work receive the same minimum protection under the Berne Convention itself, variations in national law can undermine the treaty’s harmonizing effect.

A. Redefining “Publication”

The fundamental distinction between published and unpublished works is obscured when networks are involved. Article 3(3) of the Berne Convention defines “published works” as “works published with the consent of their authors, whatever may be the means of manufacture of the copies, provided that the availability of such copies has been such as to satisfy the reasonable requirements of the public, having regard to the

128. The similarity is underscored by the fact that the collective license is the only avenue currently available to enforce authors’ rights in “home taping” or downloading. See Id. at 70.
129. See GORMAN & GINSBURG, supra note 93, at 791.
130. Berne Convention, supra note 9, art. 3(1)(b), S. TREATY DOC. No. 27 at 39, 828 U.N.T.S. at 231.
131. Id. art. 3(1)(a), S. TREATY DOC. No. 27 at 39, 828 U.N.T.S. at 231.
nature of the work."\textsuperscript{132} This language seems broad enough to include works transmitted by modems since whether the work is sufficiently "available" to satisfy public expectations depends upon "the nature of the work."

The drafters of the Berne Convention made the grant of rights contingent upon the availability of copies because publication was the most important means of disseminating ideas when the Convention was drafted. The capacity to reach broader audiences through the airwaves or by means of electronic pulses was not anticipated at the Convention's inception in 1886. Now, over a century later, publication rights must be reinterpreted in the framework of digital publishing. This reinterpretation can be effected by treating each time a work is accessed on a network as the production of a "copy." Individual users do not view a single copy contained in a common database; rather, they generate their own copies each time the elements of information comprising a work are sent to their computers. The net can be most accurately analogized to a book or music store in which the owner orders as many copies of the work as buyers demand. The only difference is that a database need only have one copy of the work "in stock." A transmission request from a customer's computer will immediately produce a virtual copy. Downloading will fix the work in tangible form, but a copy is made in the computer's memory even if the user does not download.

Furthermore, the distribution of just one copy can constitute publication if that single copy's market presence allows reasonable access to the work.\textsuperscript{133} One copy of a work uploaded to a network can satisfy the public access requirement because its "nature" allows and even encourages instantaneous and widespread reproduction. Any user who wishes to access the work may copy the original posted on the net, assuming the copyright owner has granted permission. Under Article 3(3)'s first sentence, then, digitally created works seem to be "published" within the meaning of the Berne Convention if only one copy is distributed.

Interpreting the act of viewing a work available on a net as a "performance" rather than a "publication" would deny

\textsuperscript{132} Id. art. 3(3), S. TREATY DOC. No. 27 at 39, 828 U.N.T.S. at 231.
\textsuperscript{133} RICKETSON, supra note 10, at 182 (giving the example of a film, which can be viewed by many even if only one copy is distributed).
rights to the authors, composers, and visual artists whose works have traditionally been distributed in tangible form. After defining publication, Article 3(3) goes on to exclude performances and "the communication by wire or the broadcasting of literary or artistic works" from the category of published works. The rationale underlying this exception is that the act of transmission—until the advent of the nets—has typically been a transient event which does not leave behind a tangible copy. A computer network's data relay is most similar to a "performance" when the user views the work without storing it to a disk, much as he or she would view a television program or listen to the radio. Yet once the user chooses to copy the work, tangible evidence of the online communication is created and, under the present standard, the transfer becomes a "publication." Categorizing online works as being "broadcasted" based on their literal "communication by wire" fails to recognize that these works are exploited by sale on a per copy basis to the large audiences that the Berne drafters associated with print publishing. Allowing works certain safeguards if they are downloaded, and thus "published," while denying these same protections if they are merely viewed in a display would permit the user rather than the author or rights holder to effectively decide whether or not a work is published. This result would be inconsistent with the Berne Convention's purpose.

Indeed, the Convention's drafters could not have foreseen technology capable of storing individual works and allowing consumers to fix the works in tangible form at will. The document's language thus assumes that the author or rights holder decides whether or not the work is published.

134. Berne Convention, supra note 9, art. 3(3), S. TREATY DOC. NO. 27 at 39, 828 U.N.T.S. at 231.
135. See Ricketson, supra note 10, at 189.
136. The Berne Convention's stated goal is "to protect, in as effective and uniform a manner as possible, the rights of authors in their literary or artistic works . . . ." Berne Convention, supra note 9, Preamble, S. TREATY DOC. No. 27 at 37, 828 U.N.T.S. at 223.
137. See Ricketson, supra note 10, at 191 (recognizing that "[i]t can be further argued that this 'terminological error' [in the definition of 'published works'] will become increasingly apparent as new means of disseminating works come into existence.").
138. Berne Convention, supra note 9, art. 3(3), S. TREATY DOC No. 27 at 39, 828 U.N.T.S. at 231 ("[P]ublished works' means works published with the consent of their authors . . . .").
author who contracts with a database operator to make his or her work available in that database has clearly given consent for digital publication. This author's work will be stored permanently in a computer memory bank and will be accessible to the public under the terms of Article 3(3). However, most digital authors bypass publishers altogether and post works on the net directly from their own computers. These works also remain fixed in the computer's memory until erased. Therefore, they are more like published works waiting on shelves to be bought than television programs broadcasted only once. Absent an express authorial provision that a digital work is intended to be a performance, the metaphor of electronic "publication" should be read literally in the eyes of the law.

B. Should Moral Rights Be Extended to Computer Networks?

Full Berne protection on the net means that moral rights will attach to digital works. Authors' moral rights include the right to be recognized as the work's author and, conversely, to prevent others from being erroneously credited with his or her work as well as the right to enjoin modifications of the work that harm the author's reputation.\textsuperscript{139} Moral rights are separate from economic rights under the Berne Convention,\textsuperscript{140} allowing an author to restrict certain uses of a work even after he or she has sold all other rights. Most member nations, however, usually recognize the alienability of moral rights.\textsuperscript{141}

Moral rights would be extremely difficult to enforce on the networks. In the case of the attribution right, a network user can easily delete the author's name and re-disseminate the work at the touch of a button. Removing all traces of authorship from a digital work generally demands much less effort and expense than expunging them from a book jacket, album cover, art work, or videocassette. This threat to rights holders is compounded by the industry's reluctance to commit to technological solutions to piracy, such as "locking" devices implanted in disks to prevent downloading.\textsuperscript{142} This hesitation is un-
derstandable in light of the fact that anti-copying mechanisms can be neutralized by able programmers or "unlocked" by programs available on the underground market. Finally, most, if not all, Internet users log on under an assumed name. The strings of letters and numbers used as network "addresses" do not necessarily reveal the user's location or other identifying information. Nor can government users force network users to identify themselves at each log-on. Such measures would be a gross intrusion of citizens' privacy and impossible to enforce without a costly monitoring system.

Despite these obstacles, the right of attribution epitomizes the Berne Convention's conception of authorship. Recognizing and rewarding authors who contribute creative works to society is the very foundation of copyright policy. Even when a member nation acknowledges limited moral rights or none at all, a means of identifying authors in digital media is necessary to encourage the production of new works. Excessive government intervention in the networks however, will only diminish competition in a still-uncertain venue. A better, though far from perfect solution, lies in Union-wide legislation establishing a standard mechanism to be used on all computer networks. Computers linked to the net follow a "copy" command when a user downloads to a disk or printer. A Union regulation or directive would instruct network operators to embed another command within the copy command in use on their systems. This second set of instructions would automatically transfer the author's name from its position on the original to a designated space on the copy. Copyright notice would be programmed to appear on each page of the duplicated work, or every detail downloaded from a digitized image.

143. The Internet itself is an excellent source of pirated software. See United States v. LaMacchia, 871 F. Supp. 535, 536 (D. Mass. 1994) (federal prosecution of a student bulletin board operator whose trafficking in copyrighted programs drew "worldwide traffic generated by the offer of free software.")

144. Berne Convention, supra note 9, Preamble, S. TREATY Doc. No. 27 at 37, 828 U.N.T.S. at 223; cf. U.S. CONST. art. I, § 8, cl. 8 (granting Congress the power "[to promote the Progress of Science and the useful Arts, by securing for limited times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries . . . .").


146. The American-based legal networks WESTLAW and LEXIS currently use such a system.
these measures might not guarantee prevention of the criminal equipped with state-of-the-art technology and computer expertise, harmonizing network commands internationally would make copyright infringement a far more difficult process. Legislative commitment to protecting rights holders interests would also signal the end of the nets' operation outside the law.

The moral right of integrity raises issues that are more difficult to balance with copyright policy. The right is more difficult to enforce than that of attribution since it requires that the work be preserved in a pristine state. This demand can place an undue burden on consumers' ability to use the work. Due to the ease and speed with which documents can be created and distributed, every user's potential to be an author is increased dramatically. The nets' interactive nature encourages users to add their own contributions to existing works and to link other works together. An offensive addition would be actionable in a jurisdiction that recognizes moral rights, if the author could prove that the altered work harmed his or her reputation. Such harm is readily foreseeable when a user could anonymously circulate the insulting material to a potential readership of millions. However, targeting violations of authors' right of integrity would require detecting the culpable user. Even assuming the feasibility of assigning identification codes to each user, would-be copyright infringers could hardly be expected to log on using their proper net-names. Similarly, programming the network to reject users' additions to works would enforce authors' rights at the expense of users' legitimate interests.

To prioritize user access to the net's unique communications services, an author's consent for a work to appear on a net could constitute an implied waiver of the right of integrity. The waiver could be embodied in a contract with consideration provided in exchange for abrogation of the right. Reputational

147. The phrase "desktop publishing" captures the user's ability to reach a large audience. If freedom of the press truly applies only to those who own one, widespread network access will facilitate democratic information exchange. See Jim Louderback, The Internet Emerges as a Global Comm Link, PC Wk., Sept. 27, 1993, at 100 (describing the Internet as a resource for human rights activists from Kenyan doctors to Croatian government officials).

148. Berne Convention, supra note 9, art. 6bis(1), S. TREATY DOC. No. 27 at 41, 828 U.N.T.S. at 233.
interests could still be enforced through actions for defamation where an author armed with a backup copy of the unmodified work and solid evidence of character harm could recover damages for the injury. The possibility of money damages would have a stronger deterrent effect on potential infringers than the injunctive remedy allowed in a moral rights action. Penalizing computer defamation would allow authors with bona fide causes of action to assert their rights without prior restraints on electronic speech. A contrary approach of allowing injunctive relief would only diminish the available databases, devaluing the networks' services and in turn depressing the worth of the works they contain. The enforcement of these economic rights is a more immediate concern than authors' moral rights in computer networks. While the Berne Convention provides certain minimum standards, its guidelines must be viewed in conjunction with the supreme law of the European Union—the Treaties Establishing European Unity.

IV. CONCLUSION

Computer networks have been compared to the American frontier in that they both fascinate Europeans with their expansionist lure and sometimes lawless ambiance. As did the physical frontier, the virtual terrain charted by the nets contains rich resources. This potential must be exploited wisely by governments providing legal guidance without burdening the developing market. Now that the digital frontier is no longer the province of one nation but the product of international transactions, the European Union's socioeconomic structure allows a unique opportunity to set the standard for the

149. See, e.g., Kimberly Richards, Comment, Defamation Via Modern Communication: Can Countries Preserve Their Traditional Policies?, 3 TRANSNAT'L LAW. 613 (1990) (comparing different elements of a prima facie cause of defamation under American, British, and Canadian law).

150. The Treaty Establishing European Union does not contain an equivalent of the American Constitution's First Amendment right to free speech and a free press. However, a tradition of free speech has been present from the Community's origins.

151. Networks operate on the theory that a new technology's value increases proportionately with its users' ranks.

152. Bruce Sterling, Between the Lines, THE TIMES (London), Apr. 10, 1993, Features Section, at 65 (commenting that "[i]ike most frontiers, cyberspace is a breeding ground for crime.").
protection of intellectual property on the networks.

The ease with which digital works can be rerouted over geographic borders and the lack of technological harmonization within the Union should prompt reevaluation of sweeping parallel import bans. While preservation of a free market is critical to the nets’ continued evolution, their inherent fluidity contributes more to the flow of goods and services than any government regulation. Directives and research initiatives harmonizing member nations’ technology should therefore remain the Union’s priority. As international standards emerge, a more liberal view toward licensing that protects authors’ rights would further encourage investment in new technologies. To this end, the European Court should reconsider the Commission’s view in the Magill cases. Authors’ rights themselves must also be restructured. The Berne Convention must expand its definition of publication, while moral rights other than attribution should be waived by uploading one’s work to a net. A digital collection society and related tracking mechanisms should be built into the networks to ensure that authors are rewarded for their efforts. Implementing these measures will lay a strong foundation for the Union’s emerging technological and legal networks in the years to come.

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