1990

Creation and Commercial Value: Copyright Protection of Works of Information

Jane C. Ginsburg
Columbia Law School, jane.ginsburg@law.columbia.edu

Follow this and additional works at: https://scholarship.law.columbia.edu/faculty_scholarship

Part of the [Intellectual Property Law Commons](#), and the [Property Law and Real Estate Commons](#)

Recommended Citation

Jane C. Ginsburg, *Creation and Commercial Value: Copyright Protection of Works of Information*, 90 COLUM. L. REV 1865 (1990).

Available at: https://scholarship.law.columbia.edu/faculty_scholarship/59

This Article is brought to you for free and open access by the Faculty Publications at Scholarship Archive. It has been accepted for inclusion in Faculty Scholarship by an authorized administrator of Scholarship Archive. For more information, please contact scholarshiparchive@law.columbia.edu.

CREATION AND COMMERCIAL VALUE: COPYRIGHT PROTECTION OF WORKS OF INFORMATION*

*Jane C. Ginsburg***

TABLE OF CONTENTS

Introduction	1865
I. Copyright Protection of Informational Works: An Historical Perspective	1873
A. Laborious Authorship	1875
B. Individuality and Authorship	1881
C. Personality, Information, Investment, and Technology	1888
II. Informational Works in Contemporary Copyright Analysis	1893
A. Subject Matter	1895
B. Scope	1901
C. Information and Incentives	1907
1. Economic Arguments for a Broad Scope of Protection for Low Authorship Works	1907
2. The Fallacy of the Fact-Expression Distinction	1913
III. A Copyright Law for Low Authorship Works	1916
A. Alternative 1: No Copyright Liability	1918
B. Alternative 2: Full Copyright Liability	1922
C. Alternative 3: Compelled Collective Licensing of Derivative Information Compilations	1924
1. Justifications for Compulsory Licensing	1925
2. Modifying the 1976 Act: Subject Matter to Which the License Would Apply	1927
3. Modifying the 1976 Act: Rights Subject to the License	1930
4. Rate-Setting	1932
5. Other Issues	1935
Conclusion	1936

INTRODUCTION

In 1899, Augustine Birrell, a Victorian barrister, lamented: "The

* Copyright © 1990, Jane C. Ginsburg.

** Associate Professor of Law, Columbia University School of Law. B.A. 1976, M.A. 1977, University of Chicago; J.D. 1980, Harvard University; D.E.A. 1985, University of Paris. Research for this article was supported in part by the Columbia Law School Summer Research Grants program.

Many thanks to my colleagues Vince Blasi, Victor Goldberg, Jack Kernochan, and Henry Monaghan, and to Douglas Baird, Stan Besen, Robert Gorman, Jessica Litman, Leo Raskind, George Spera, and Lloyd Weinreb for extensive comments on previous drafts.

question of copyright has, in these latter days, with so many other things, descended into the market-place, and joined the wrangle of contending interests and rival greedinesses."¹ Birrell's remark conveys distaste for those authors who would "realise the commercial value of their wares."² But the question of copyright has always been joined with that of commercial value. Indeed, by affording authors limited monopoly protection for their writings, our Constitution relies on wrangling greed to promote the advancement of both creativity and profit.³ Nonetheless, the distinction Birrell implies between copyright-worthy works of authorship and mere commercial "wares" pervades much modern copyright law.

Modern copyright comfortably embraces works manifesting a personal authorial presence. Protection depends on whether the work manifests authorial personality, not whether that personality demonstrates either taste or talent.⁴ On the other hand, modern copyright encounters far more difficulty accommodating works at once high in commercial value but low in personal authorship. The paradigm for this kind of work and its attendant problems is a compilation of factual information.⁵

This Article examines the application of copyright law to personality-deprived information compilations such as directories, indexes, and data bases—endeavors I shall collectively dub works of "low authorship." I argue that the problems surrounding the inclusion of these works within the subject matter of copyright and the delineation of their appropriate scope of protection reflect a misguided—and increas-

1. A. Birrell, *Seven Lectures on the Law and History of Copyright in Books* 195 (1899).

2. *Id.*

3. See U.S. Const. art I, § 8, cl. 8 ("Congress shall have Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries"). A similar policy underlay the English Statute of Anne of 1710, titled "An Act for the Encouragement of Learning, by Vesting the Copies of Printed Books in the Authors or Purchasers of such Copies," 1710, 8 Anne, ch. 19. See Ginsburg, *A Tale of Two Copyrights: Literary Property in Revolutionary France and America*, 64 Tul. L. Rev. 991, 998 (1990). From copyright's inception in the United States, most copyrighted endeavors have occupied lowly dwellings in the market place of informational works. See, e.g., *Federal Copyright Records 1790-1800*, at xxii (J. Gilreath ed. 1987); Ginsburg, *supra*, at 1002-05.

4. See, e.g., *Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239, 250-52 (1903) (Holmes, J.); *Original Appalachian Artworks, Inc. v. Toy Loft, Inc.*, 684 F.2d 821, 824 (11th Cir. 1982); *Alfred Bell & Co. v. Catalda Fine Arts, Inc.*, 191 F.2d 99, 102-03 (2d Cir. 1951).

5. See, e.g., 1 M. Nimmer & D. Nimmer, *Nimmer on Copyright* § 3.04 (1990) [hereinafter *Nimmer on Copyright*] (one who discovers and discloses facts or public domain documents is not an "author"); Patterson & Joyce, *Monopolizing the Law: The Scope of Copyright Protection for Law Reports and Statutory Compilations*, 36 UCLA L. Rev. 719, 759-64 (1989) (inquiring whether page numbers in law reports "express[] the 'unique personal reaction' of the compilation author upon the subject matter" (quoting *Bleistein*, 188 U.S. at 250)).

ingly untenable—attempt in United States copyright law to impose a unitary, personality-based concept of copyright. Itself a product of the late nineteenth century, the personality concept of copyright continues—often subconsciously, but certainly pervasively—to inform our ideas about copyright today, too often to the exclusion of competing models of copyright.⁶ But a unitary concept of copyright is neither faithful to earlier copyright history, nor well adapted to contemporary technologies of creation and copying of informational works.

The problems begin with copyright law's designation of "original works of authorship" as the subject matter of protection.⁷ The early history of copyright coverage indicates that this designation includes works of little personal authorship yet considerable expenditure of labor and capital.⁸ But the unitary personality concept suggests that "original authorship"⁹ describes only those works manifesting a subjective authorial presence. The prevalent contemporary understanding identifies authorial subjectivity as the hallmark of original works of authorship: original works reflect the personalities of their authors or, at the very least, embody their creators' subjective choices in the selection or arrangement of material.¹⁰

6. See, e.g., *Financial Information, Inc. v. Moody's Investors Serv., Inc.*, 808 F.2d 204, 207 (2d Cir. 1986), cert. denied, 108 S. Ct. 79 (1987); *Eckes v. Card Prices Update*, 736 F.2d 859, 862–63 (2d Cir. 1984); authorities cited *supra* note 5.

7. United States Copyright Act of 1976, 17 U.S.C. § 102(a) (1988).

8. See *infra* notes 34–52 and accompanying text.

9. This Article addresses original authorship as a single concept. Some authorities separate the two terms, treating "originality" as meaning independent generation (not copied), and "authorship" as referring to some minimal level of creativity. See, e.g., Patry, *Copyright in Collections of Facts: A Reply*, Comm. & L., Oct. 1984, at 11, 19 (and sources cited therein); Comment, *Originality and Creativity in Reporter Pagination: A Contradiction in Terms?*, 74 Iowa L. Rev. 713, 716–18 (1989). I concur with other authorities in pairing the two terms. See, e.g., *Trade-Mark Cases*, 100 U.S. 82, 94 (1879) (declaring that a writing in the constitutional sense must be original: "[W]hile the word *writings* may be liberally construed . . . to include original designs for engravings, prints, &c., it is only such as are *original*, and are founded in the creative powers of the mind. The writings which are to be protected are *the fruits of intellectual labor* . . ."); G. Curtis, *Treatise on the Law of Copyright* 169 n.1 (Boston 1847) ("The statutes both in England and America make use of the word *Author*, which *ex vi termini* imports originality, to some extent.").

10. See, e.g., *Financial Information, Inc. v. Moody's Investors Serv., Inc.*, 808 F.2d at 207–08; *Eckes v. Card Prices Update*, 736 F.2d at 862–63; Nimmer on Copyright, *supra* note 5, at § 3.04; W. Patry, *Latman's the Copyright Law* 63–64 (6th ed. 1986) (applying same standard of copyrightability to fact collections as to any other kind of compilation and rejecting recognition of copyright based on labor invested in collecting facts); Patterson & Joyce, *supra* note 5, at 759–67; Note, *Copyright Protection for Compilations of Fact: Does the Originality Standard Allow Protection on the Basis of Industrious Collection?*, 62 Notre Dame L. Rev. 763, 769 (1987) [hereinafter Note, Copyright Protection]; see also Francione, *Facing The Nation: The Standards for Copyright, Infringement, and Fair Use of Factual Works*, 134 U. Pa. L. Rev. 519 (1986) (criticizing view combining facts and expression into a copyrightable "totality," and arguing that copyright should not protect facts in any guise).

The question of originality has received increasing attention in the last ten, and

Settling the appropriate subject matter of copyright protection will not resolve all questions, however. Even if a work is protectable, it remains necessary to determine what kind of copying will constitute infringement. The copyright law exempts from protection facts and ideas contained within a work.¹¹ Thus, in principle, no matter how much original authorship the work displays, the facts and ideas it exposes are free for the taking; the copyright may cover only the facts and ideas *as they are presented by the author*. But the very same facts and ideas may be divorced from the context imposed by the author, and restated or reshuffled by second comers, even if the author was the first to discover the facts or to propose the ideas. As a result of the "fact/expression or idea/expression dichotomy," the *scope* of copyright protection in an informational work may be quite scanty.¹²

These notions of original authorship and of copyright scope provide little hospitality for works essentially manifesting not creative individuality but "sweat of the brow," or its modern technological equivalents. Personality-based characterizations of many low authorship informational works seem contrived.¹³ More importantly, these

particularly the last five, years of copyright scholarship. See, e.g., Olson, Copyright Originality, 48 Mo. L. Rev. 29 (1983); Oppenheimer, Originality in Art Reproductions: "Variations" in Search of a Theme, 27 Copyright L. Symp. (ASCAP) 207 (1982); Raskind, The Continuing Process of Refining and Adapting Copyright Principles, 14 Colum.-VLA J.L. & Arts 125 (1990); Stimson, Note: Factual Compilations—Copyright Protection for Compilation Depends on Degree of Originality Involved in Assembling Facts—*Financial Information, Inc. v. Moody's Investors Service, Inc.*, 33 J. Copyright Soc'y 1 (1985); Note, Arrangements and Editions of Public Domain Music: Originality in a Finite System, 34 Case W. Res. L. Rev. 104 (1983); Note, Originality in Cartography: The Standard for Copyright Protection, 10 Golden Gate U.L. Rev. 469 (1980); Note, Copyright Protection for Factual Compilations: Reviving the Misappropriation Doctrine, 56 Fordham L. Rev. 933 (1988) [hereinafter Note, Factual Compilations]; Comment, *supra* note 9, at 713; Note, Copyright Protection, *supra*, at 763. The corpus of prior law journal articles on the subject is rather slim. See, e.g., Dworkin, Originality in the Law of Copyright, 11 Copyright L. Symp. (ASCAP) 60 (1959); Whicher, Originality, Cartography, and Copyright, 38 N.Y.U. L. Rev. 280 (1963); Yankwich, Originality in the Law of Intellectual Property, 11 F.R.D. 457 (1952); see also A. Lindey, Plagiarism and Originality 20–23 (1952) (originality does not preclude borrowing as long as borrowed material is used in a way which reflects borrower's unique personality and perspective).

11. 17 U.S.C. § 102(b) (1988).

12. If others may so freely extract and exploit facts and ideas contained within an informational work, one may wonder whether the initial inquiry into a work's originality is necessary. In any event, the raw information eludes copyright control. But there is a difference (albeit one not always observed) between a determination of lack of original authorship and a ruling that the defendant has copied only unprotectable facts. If the work is not original, it may be reproduced verbatim. One may copy even the form in which the information is presented. By contrast, if the work is original, the copyright holder at least may protect its particular manner of conveying the facts, even though she may not prevent others from copying the facts and presenting them differently.

13. See, e.g., West Publishing Co. v. Mead Data Cent., Inc., 799 F.2d 1219 (8th Cir. 1986) (finding copyrightable "arrangement" of judicial decisions in reporters despite absence of evidence that organization of decisions was anything other than random), cert. denied, 479 U.S. 1070 (1987); Southern Bell Tel. & Tel. Co. v. Associated Tel.

characterizations seem wholly beside the point. Even if one could discern subjective "arrangement" in works such as maps, address directories, and compilations of judicial decisions, that arrangement may bear little, if any, connection to the work's central importance as a source of information.¹⁴ Moreover, to the extent that the worth of the work lies in the information, rather than in the form imposed on the facts, modern copyright's emphasis on personality-manifesting characteristics fails to secure the commercial value of these kinds of endeavors, even though the demand for productions such as directories and data bases is ever increasing.¹⁵ By the same token, even when courts do in fact protect a compilation's commercial value, they express disconcertion at the incongruence between the result and standard copyright rationales.¹⁶ Commentators prove even more ill at ease, labeling some courts' *de facto* protection of the commercial value of compiled facts as "the most troublesome aspect of copyright protection."¹⁷

Directory Publishers, 756 F.2d 801, 809-10 & n.9 (11th Cir. 1985) (stating that Atlanta Yellow Pages telephone directory meets standard of original selection and arrangement without explaining *how* an alphabetically arranged directory satisfies this standard). For one of the more persuasive attempts to clothe labor-intensive informational works in the rhetoric of authorship, see Denicola, Copyright in Collections of Facts: A Theory for the Protection of Nonfiction Literary Works, 81 Colum. L. Rev. 516 (1981) ("collection" of data as original authorship).

14. For some examples in which courts have protected works on the grounds of labor expended by plaintiff and appropriated by defendant, rather than because of subjective characteristics—if any—of the works, see, e.g., *Trow Directory, Printing & Bookbinding Co. v. Boyd*, 97 F. 586, 587 (C.C.S.D.N.Y. 1899) (directory of business listings); *Banks v. McDivitt*, 2 F. Cas. 759, 761 (C.C.S.D.N.Y. 1875) (No. 961) (compilation of New York state court rules of practice); *Blunt v. Patten*, 3 F. Cas. 763, 764 (C.C.S.D.N.Y. 1828) (No. 1580) (navigation charts); see also *Rural Tel. Serv. Co. v. Feist Publications, Inc.*, 663 F. Supp. 214 (D. Kan. 1987) (telephone directory protected against competitor using plaintiff's listings as starting point for its compilation, rather than conducting independent canvass of names and addresses and resorting to plaintiff's work only for subsequent verification), *aff'd*, No. 88-1679 (10th Cir. Mar. 8, 1990), cert. granted, 59 U.S.L.W. 3209 (U.S. Oct. 1, 1990) (No. 89-1909); *Central Tel. of Va. v. Johnson Publishing Co.*, 526 F. Supp. 838 (D. Colo. 1981) (same).

15. See, e.g., Technology, Intellectual Property, and the Operation of Information Markets in Office of Technology Assessment, U.S. Congress, Intellectual Property Rights in an Age of Electronics and Information 157, 170-74 (1986) [hereinafter OTA Report]. See generally Morgan Rep. on Directory Publishing, a monthly publication for the directory and data base industry.

16. See, e.g., *National Business Lists, Inc. v. Dun & Bradstreet, Inc.*, 552 F. Supp. 89, 92 (N.D. Ill. 1982).

17. 1 P. Goldstein, Copyright: Principles, Law and Practice § 2.14.2, at 180 (1989); accord W. Patry, *supra* note 10, at 62 (noting "current conceptual confusion over the proper theoretical basis for protecting conventional compilations"); Note, Copyright of Factual Compilations: Public Policy and the First Amendment, 23 Colum. J.L. & Soc. Probs. 347, 348 (1990) ("It is anomalous that bare facts not subject to copyright are protected when collected or compiled . . ."); Note, Copyright Protection, *supra* note 10, at 763, 764 (criticizing courts that have adopted the "industrious collection" standard for ignoring principle that copyright protects "original works that reflect the author's personality").

Effective protection for low authorship, information-intensive works presses against the apparent coherence of copyright. The sensible response is neither artificially to force such works into a high authorship mold, nor to quarantine those decisions protecting the commercial value of low authorship works lest the grander principles of copyright be infected.¹⁸ Rather, the problem requires facing—and discarding—the currently predominant unitary approach to copyright. Copyright would fare better, and would prove less “troublesome,” if its surface coherence were relinquished.¹⁹ We have now, as we have long had, two kinds of copyright: in high authorship works, such as novels and narrative histories, copyright protects the authorial presence within the work; in low authorship works, such as telephone directories and compilations of stock quotations, copyright protects the labor and resources invested in the work’s creation. Copyright thus concerns both creation and commercial value. The error of our modern doctrine lies in its implicit, but unexamined, claim that a personality-based approach to copyright law has completely displaced the sweat/investment model. Recognition of our dual bases for copyright not only would be more faithful to our copyright history, but also would squarely confront the interests at issue in a rapidly growing sector of publishing activity.

Once released from a unitary conception of copyright, the difficult pragmatic question becomes the appropriate *scope* of protection for a low authorship work. The current resolutions are unsatisfactory. If the low authorship work is ruled “unoriginal,” it receives no protection. By contrast, judicial solicitude for commercial value may lead to making the information gatherer the proprietor of all possible recombinations within a dataset, to the exclusion of second comers who would create variant informational works. Neither result is desirable. I advocate protection subject to a compulsory license enabling competitors to access, copy, and reorganize data gathered by the first compiler, but af-

18. Cf. *Miller v. Universal City Studios, Inc.*, 650 F.2d 1365, 1370-72 (5th Cir. 1981) (holding research uncopyrightable and treating cases affording copyright protection to directories as *sui generis* and exceptional); 1 P. Goldstein, *supra* note 17, § 2.14.2, at 184 (stating that better line of authority protects factual compilation relative to degree of originality in work’s arrangement in accordance with underlying principle of copyright).

19. Indeed, our copyright regime already tolerates considerable disuniformity with respect to the extent of statutory protection. The United States Copyright Act of 1976 provides a wide array of special limitations on the scope of copyright protection for certain classes or uses of works. See 17 U.S.C. § 111(c)-(d) (1988) (compulsory license for cable retransmissions); *id.* § 113 (permitting certain unlicensed reproductions of pictorial, graphic or sculptural works in the context of advertising); *id.* § 114 (scope of protection for sound recordings extend neither to imitations of recorded sounds nor to public performances); *id.* § 115 (compulsory license for mechanical recording); *id.* § 116(a) (compulsory license for jukebox performances of nondramatic musical compositions); *id.* § 117 (owners of copies of computer programs entitled to make archival copies and to copy and adapt programs in conjunction with their use in computer); *id.* § 118 (compulsory license for certain public broadcasting performances); *id.* § 119 (compulsory license for receipt of broadcast signals by home satellite dishes).

fording the first compiler compensation for the appropriations.²⁰ This solution would, I argue, best meet the general copyright goal of promoting the progress of knowledge through the creation and enforcement of private rights in works of authorship.²¹ It would strike an appropriate balance between affording first compilers the incentives to undertake the collection of information, and allowing second comers to create further informational works relying on predecessor collections, thus increasing overall public access to a broad variety of works of information.²² The result should yield an allocation of rights and duties more promising than copyright in its current discomfort now affords compilers and users of collections of facts.

Part I of this Article addresses United States protection of informational works from an historical perspective. I consider the case law and commentary in light of two theories of copyright protection: copyright as a reward for or inducement to creative labor, and copyright as the safeguard of the authorial personality present in the work. I show that United States copyright law has a long tradition of protecting works characterized primarily by the investment of labor and money in their creation. I also show, however, that under an Enlightenment labor-rewarding view of copyright, the scope of protection was generally limited to virtually verbatim copying. By contrast, the later, Romantic conception of copyright as the guarantor of the author's personality rights tended to broaden the reach of individual copyrights to interdict not only verbatim copying but also various kinds of alterations made to the work.

Part II examines the contemporary posture of copyright protection for informational works. I argue that many courts (and commentators) have lost sight of the dual bases for United States copyright law and have given precedence to the personality concept of original authorship. Yet, this "exaltation of authorship"²³ is not carried through completely. Courts have reached contradictory results respecting both the originality requisite to inclusion of a work within copyright's subject matter and the kind of copying that constitutes infringement. On the

20. The same result may be accomplished through voluntary collective licensing, provided all information gatherers join the collective and are willing to grant nonexclusive licenses to the totality of their repertoire. While such a private law solution would be preferable to legislated compulsory licenses and their accompanying administrative burdens, the likelihood of achieving private consensus may be slim. For a fuller discussion of private and compulsory licensing, see *infra* notes 217-228 and accompanying text.

21. See *supra* note 3 and accompanying text.

22. Cf. 1 P. Goldstein, *supra* note 17, § 2.14.2 at 186 (suggesting that right to injunction for violation of reproduction right in directory might in some instances be more of an incentive than necessary to promote compilation of directories, and therefore positing limitation of relief to damages).

23. Brown, *Eligibility for Copyright Protection: A Search for Principled Standards*, 70 Minn. L. Rev. 579, 589 (1985) (referring to the natural rights/personality-based approach to copyright as the "exaltation of authorship").

one hand, some recent decisions, adhering to the personality concept of original authorship, have held fact compilations insufficiently original to qualify for copyright.²⁴ On the other hand, some courts are willing not only to include fact compilations within copyright subject matter but also to accord the information contained in these works a very broad scope of protection against copying. Indeed, protection is afforded against even the remanipulation of data into a different, not directly competing work.²⁵ In effect, these courts have recognized an expansive right to control derivative works, that is, to authorize or to prohibit the varying ways in which the information in a fact collection may be rearranged. Such a broad remedial reach, however, contradicts the concept that copyright protection should extend only as far as the copying of original elements; a remedy for reproduction of depersonalized information does not fit the personality paradigm.²⁶ As a result, we still have two kinds of copyright—securing both creativity and commercial value—but today we seem unwilling to admit the dualism. This reluctance injects anarchy into the protection of low authorship works: copyright protection for fact compilations ranges from all to nothing, depending on the court.

Part III proposes a revision of the copyright statute to extend the scope of protection of low authorship informational works to the preparation of derivative versions, but subject to a compulsory license. I examine alternatives to this regime, including no protection and imposition of full liability, and conclude that neither resolution is desirable. Absence of liability threatens to diminish the incentives to engage in initial information gathering; full liability threatens to restrict access to compiled information by giving too much market power to the first compilers. A compulsory license, albeit a suspect device in copyright law generally,²⁷ offers compilers and users of information an acceptable exit from the impasse.

24. See, e.g., *Financial Information, Inc. v. Moody's Investors Serv., Inc.*, 808 F.2d 204 (2d Cir. 1986) (index cards bearing bond call information), cert. denied, 108 S. Ct. 79 (1987); cf. *Eckes v. N. Card Prices Update*, 736 F.2d 859 (2d Cir. 1984) (list of baseball cards printed from 1909 to 1979 protectable on ground of subjective selection and judgment in creating a subset of listing). See generally Jones, *Copyright: Factual Compilations and the Second Circuit*, 52 *Brooklyn L. Rev.* 679 (1986) (criticizing Second Circuit imposition of subjective creativity standard on compilers of fact works).

25. See, e.g., *Illinois Bell Tel. Co. v. Haines & Co.*, 683 F. Supp. 1204, 1210 (N.D. Ill. 1988), aff'd, 905 F.2d 1081 (7th Cir. 1990); *National Business Lists, Inc. v. Dun & Bradstreet, Inc.*, 552 F. Supp. 89, 96 (N.D. Ill. 1982).

26. See, e.g., Abramson, *How Much Copying Under Copyright?: Contradictions, Paradoxes, Inconsistencies*, 61 *Temp. L.Q.* 133, 136-50 (1988); Raskind, *supra* note 10, at 135-39, 148-55 (suggesting that scope of protection be commensurate with work's level of originality).

27. See, e.g., Besen, Manning & Mitchell, *Copyright Liability for Cable Television: Compulsory Licensing and the Coase Theorem*, 21 *J.L. Econ.* 67 (1978); Goldstein, *Preempted State Doctrines, Involuntary Transfers and Compulsory Licenses: Testing the Limits of Copyright*, 24 *UCLA L. Rev.* 1107, 1135-36 (1977).

I. COPYRIGHT PROTECTION OF INFORMATIONAL WORKS: AN HISTORICAL PERSPECTIVE

This Part explores notions of original authorship emerging from copyright case law in England and the United States in the eighteenth and nineteenth centuries. The kind of works at issue in early copyright disputes were most often highly useful, if artistically uninspiring, works such as maps, arithmetic and grammar primers, calendars, and law books.²⁸ The overwhelming presence of informational works reflects an important legislative policy underlying English and American copyright: the 1710 English Statute of Anne, the 1787 United States Constitution, and the 1790 United States federal copyright statute all characterized copyright as a device to promote the advancement of knowledge.²⁹ Perhaps because of the predominance of informational

28. See generally A. Birrell, *supra* note 1, at 170–71:

In reading the cases in the [English] Reports for the last hundred years, you cannot overlook the literary insignificance of the contending volumes. The big authors and big books stand majestically on one side—the combatants are all small fry. The question of literary larceny is chiefly illustrated by disputes between book-makers and rival proprietors of works of reference, sea charts, Patteson's "Roads," the antiquities of *Magna Graecia*, rival encyclopaedias, gazetteers, guide books, cookery books, law reports, post office and trade directories, illustrated catalogues of furniture, statistical returns, French and German dictionaries, Poole's farce, "Who's Who?" Brewer's "Guide to Science."

Similarly, of the five petitions to the first Congress seeking exclusive printing privileges, pending enactment of a copyright act, four concerned reference works; the fifth addressed family memoirs. See *Proceedings in Congress During the Years 1789 and 1790, Relating to the First Patent and Copyright Laws*, 22 J. Pat. Off. Soc'y 243, 243–81 (1940). Work on the deposit records of all works registered for federal copyright protection during the first ten years of the first copyright statute also shows a great preponderance of informational and instructional works, such as English grammars and arithmetic books. See *Federal Copyright Records 1790–1800*, *supra* note 3.

For a discussion of some political and social reasons for the dominance of informational works in early United States copyright, see Ginsburg, *supra* note 3, at 998–1005.

29. See An Act for the Encouragement of Learning by Vesting the Copies of Printed Books in the Authors or Purchasers of such Copies, 1710, 8 Anne, ch. 19, preamble (act is to discourage piracy and is "for the Encouragement of Learned Men to Compose and Write useful Books"); U.S. Const. art. I, § 8, cl. 8 ("Congress shall have Power . . . To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries."); Act of May 31, 1790, ch. 15, 1 Stat. 124, reprinted in *Copyright Enactments of the United States 1783–1906*, at 32 (T. Solberg ed. 1906) (titled "An Act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies, during the times therein mentioned").

Despite the presence in the constitutional text of an incentive rationale for recognition of patents and copyrights, the role of copyright as an inducement to creation received surprisingly little emphasis in the United States during the nineteenth century. Modern copyright theory often relies heavily on the incentive justification for copyright (often to limit copyright protection, but sometimes to enlarge it, see authorities cited *infra* notes 164–165), but earlier commentators treated the incentive justification either as an afterthought, see, e.g., G. Curtis, *supra* note 9, at 20–21, or not at all, see, e.g., E. Drone, *A Treatise on the Law of Property in Intellectual Productions in Great Britain and the United States* 44–45 (1879) [hereinafter Drone on Copyright].

subject matter, the concept of authorship and the basis for copyright protection underlying judicial decisions until the mid-nineteenth century seemed to focus on the labor, rather than the inspiration, invested in the work. No matter how banal the subject matter, if the author's work resulted from original efforts, rather than from copying preexisting sources, the author was entitled to a copyright.³⁰

By the mid to late nineteenth century, however, courts and commentators began to offer a different characterization of authorship, and a correspondingly different rationale for copyright coverage. These authorities viewed authorship as an emanation of the author's personality: a work is protectable because it incorporates something of its creator's unique individuality.³¹ The keystone of originality, then, would no longer be the independence of the author's labors, but the distinctiveness of the work's conception or execution. Subjective judgment, rather than diligent collection, would be the locus of the work's originality. The requisite "distinctiveness" or "subjectivity," however, did not imply a high level of either quality. Sufficient original authorship would be manifest simply because each author is a distinct individual and inevitably stamps some part of herself upon the work: "in ordinary life no two descriptions of the same fact will be in the same words The order of each man's words is as singular as his countenance"³²

But it would be misleading to suggest that this shift in copyright philosophy toward a more subjective view of authorship in fact spurred abandonment of the prior labor-oriented approach. The two views continued to coexist; indeed, sometimes they have been collapsed: if the author did not copy the work from a prior source, the work must be "his own" and therefore original.³³ Thus, throughout the nineteenth

30. See, e.g., *Longman v. Winchester*, 16 Ves. Jun. 269, 271, 33 Eng. Rep. 987, 987-88 (Ch. 1809) (Lord Eldon) (work at issue was a court calendar); *Hogg v. Kirby*, 8 Ves. Jun. 215, 221, 32 Eng. Rep. 336, 339 (Ch. 1803) (Lord Eldon positing protection for "an account of natural curiosities").

31. See, e.g., *Bleistein v. Donaldson Lithographing*, 188 U.S. 239, 250 (1903) (Holmes, J.); *Jefferys v. Boosey*, 4 H.L.C. 815, 866-81, 10 Eng. Rep. 681, 702-07 (1854) (Erle, L.J.).

32. *Jefferys v. Boosey*, 4 H.L.C. at 869, 10 Eng. Rep. at 703; see also *Jewelers' Circular Publishing Co. v. Keystone Publishing Co.*, 274 F. 932, 934 (S.D.N.Y. 1921) (L. Hand, J.) ("no photograph, however simple, can be unaffected by the personal influence of the author, and no two will be absolutely alike"), *aff'd*, 281 F. 83 (2d Cir.), *cert. denied*, 259 U.S. 581 (1922).

33. See, e.g., *Alfred Bell & Co. v. Catalda Fine Arts, Inc.*, 191 F.2d 99, 102-03 (2d Cir. 1951) ("All that is needed . . . is that the 'author' contributed something more than a 'merely trivial' variation, something recognizably 'his own.' Originality in this context 'means little more than a prohibition on actual copying.' No matter how poor artistically the 'author's' addition, it is enough if it be his own.") (citations omitted); see also *Apple Barrell Prods., Inc. v. Beard*, 730 F.2d 384, 388 (5th Cir. 1984) ("a collection of non-copyrightable material may qualify for protection if *original skill and labor* is expended in creating the work") (emphasis added); cf. *L. Batlin & Son v. Snyder*, 536 F.2d 486, 489 (2d Cir. 1976) (*en banc*) (copyright on plastic bank copied from cast iron version held

century and into the twentieth, the concept of original authorship embraced both original labor and original creative activity.

A. Laborious Authorship

Many United States and English copyright decisions in the eighteenth and nineteenth centuries characterized copyrightable authorship in terms of the labor invested in the work. This was the analysis of the Lord Chancellor in the 1806 decision *Matthewson v. Stockdale*,³⁴ which upheld protection for plaintiff's East India calendar:

[I]f a man, from his situation having access to the repositories in the *India* House, has by considerable expence and labour procured with correctness all the names and appointments on the *Indian* Establishment, he has a copyright in that individual work; which has cost him considerable expence and labour; and employed him at a loss in other respects; though there can be no copyright in an *India* calendar, generally.³⁵

In the United States, Justice Story echoed the expense and labor litany in his 1845 Circuit Court decision *Emerson v. Davies*.³⁶

A man has a right to the copy-right of a map of a state or country, which he has surveyed or caused to be compiled from existing materials, at his own expense, or skill, or labor, or money. Another man may publish another map of the same state or country, by using the like means or materials, and the like skill, labor and expense. But then he has no right to publish a map taken substantially and designedly from the map of the other person, without any such exercise of skill, or labor, or expense.³⁷

These sorts of statements led contemporary writers of secondary sources to equate original authorship with industriousness. George Ticknor Curtis, in his 1847 copyright treatise, devoted a chapter to "the Originality Necessary to a Valid Copyright," and prescribed as follows:

Something he must show to have been produced by himself; whether it be a purely original thought or principle, unpublished before, or a new combination of old thoughts and ideas and sentiments, or a new application or use of known and common materials, or a collection, the result of his industry and skill. In whatever way he claims the exclusive privilege accorded by these laws, he must show something which the law can fix upon as the product of his and not another's

invalid because this trivial variation did not satisfy originality requirement), cert. denied, 429 U.S. 857 (1976); *Kuddle Toy, Inc. v. Pussycat-Toy Co.*, 183 U.S.P.Q. (BNA) 642, 658 (E.D.N.Y. 1974) (highly detailed art reproductions entitled to copyright protection on grounds of "originality in copying": a copy of the requisite exactitude and faithfulness to the source cannot be made without great skill and effort).

34. 12 Ves. Jun. 270, 33 Eng. Rep. 103 (Ch. 1806).

35. *Id.* at 276, 33 Eng. Rep. at 105-06.

36. 8 F. Cas. 615 (C.C.D. Mass. 1845) (No. 4436).

37. *Id.* at 619 (the case concerned the copyrightability of arithmetic book).

labors.³⁸

The later nineteenth century American copyright treatise writer Eaton S. Drone put it more succinctly: "[T]he true test of originality is whether the production is the result of independent labor or of copying."³⁹

Combined with the United States constitutional and legislative goals to "promote the Progress of Science"⁴⁰ and learning, the labor concept of copyrightability appears to furnish ample rationale for protecting all kinds of informational works, from narratives to catalogues. Inquiry into the personal or subjective character of the author's efforts would seem irrelevant to the works' copyrightability. Reflecting these principles, the first United States copyright statute covered "maps, charts, and books."⁴¹ The initial two categories are informational and labor-intensive, especially in a country of ever-expanding western frontiers. Indeed, a map or navigational chart of new territory seems a most unlikely medium for displaying subjective authorship. These works are valued, and their production is encouraged, for the information they impart, not for fanciful drafting or personal pictorial peculiarities. Protection of information, therefore, seems consistent with early principles of United States copyright.

This conclusion, however, is somewhat misleading. It is correct in asserting the *existence* of early United States copyright protection for laboriously gathered factual material. Yet it is incorrect to the extent that it may suggest substantial *scope* to the copyright coverage of fact-based works. It is important to distinguish these two factors: the availability of copyright does not automatically entail an expansive protective reach. The statement that informational works were copyrighted does not reveal what early United States courts would or would not deem an infringement.

In fact, the scope of copyright was initially rather modest. The first author might forbid the second comer's copying from the first production, but he could not prohibit a second comer from creating a competing work—if the competitor acquired the same information from primary sources.⁴² The copyright proprietor thus might prevent com-

38. G. Curtis, *supra* note 9, at 171.

39. Drone on Copyright, *supra* note 29, at 208.

40. U.S. Const. art. I, § 8, cl. 8. The term "Science," in the eighteenth-century sense, meant "knowledge." See, e.g., Cowper, *Conversation* 14 (1781) ("As alphabets in ivory employ/Hour after hour the yet unletter'd boy/Sorting and puzzling with a deal of glee/Those seeds of science call'd his ABC"), quoted in *Oxford English Dictionary* 2668 (compact ed. 1971).

41. Act of May 31, 1790, ch. 15, 1 Stat. 124, reprinted in *Copyright Enactments of the United States 1783-1906*, *supra* note 29, at 32.

42. See, e.g., G. Curtis, *supra* note 9, at 174:

[I]f a person collects an account of natural curiosities, or of works of art, or of mere matters of statistical or geographical information, and employs the labor of his mind in giving a description of them, his own description may be the subject of copyright. It is equally competent to any other person to compile

petitors from using the first work to save the time and money of original research. The same policies favoring the advancement of knowledge and the rewarding of labor that endowed informational works with copyright exculpated a second comer's reliance on the copyrighted work when he added considerable personal effort to what he copied. Copyright would protect the first author against thieves, but not against those whose investment of their borrowings from the initial source produced a higher net yield. An 1802 King's Bench decision concerning a road atlas captured some of the interests at stake in the issue of copyright scope:

[W]hen, in the defendant's book there are additional observations, . . . while I shall think myself bound to secure every man in the enjoyment of his copy-right, one must not put manacles upon science.

I think great part of the book that I have seen, Mr. Kearsley might fairly avow that he had taken it from Mr. Cary's book. I shall address these observations to the jury, leaving them to say, whether what so taken or supposed to be transmitted from the plaintiff's book, was fairly done with a view of compiling a useful book, for the benefit of the public, upon which there has been a totally new arrangement of such matter,—or taken colourable, merely with a view to steal the copy-right of the plaintiff?⁴³

A Massachusetts federal district court decision of 1847 similarly emphasized the labor-valuing limitations on the scope of protection. In a case involving a dictionary of flowers, the court inquired if the second comer's appropriations from the first author were "characterized by enough [that is] new or improved, to indicate new toil and talent, and new property and rights in the last compiler."⁴⁴

and publish a similar work. But it must be made substantially new and original, like the first work, by resort to the original sources, and must not copy or adopt from the other, upon the notion that the subject is common.

(citing *Hogg v. Kirby*, 8 Ves. Jun. 215, 221, 32 Eng. Rep. 336, 339 (Ch. 1803)); *Longman v. Winchester*, 16 Ves. Jun. 269, 271, 33 Eng. Rep. 987, 987-88.(Ch. 1809) (Lord Eldon) regarding a court calendar:

Take the instance of a map, describing a particular county; and a map of the same county, afterwards published by another person: if the description is accurate in both, they must be pretty much the same: but it is clear, the latter publisher cannot on that account be justified in sparing himself the labour and expen[s]e of actual survey, and copying the map, previously published by another. . . . [A] work, consisting of a selection from various authors, two men might perhaps make the same selection: but that must be by resorting to the original authors, not by taking advantage of the selection, already made by another.

43. *Cary v. Kearsley*, 4 Esp. 168, 170-71, 170 Eng. Rep. 679, 680 (K.B. 1802) (Lord Ellenborough); see also *Sayre v. Moore*, 1 East 358, 361 n.(b), 102 Eng. Rep. 139 n.(b) (K.B. 1785) (Mansfield, L.J.) (holding defendant's improvements on plaintiff's navigational charts preclude finding for plaintiff as to copyright violation).

44. *Webb v. Powers*, 29 F. Cas. 511, 517 (C.C.D. Mass. 1847) (No. 17,323).

In the Massachusetts federal court's formulation, "new toil and talent" give rise to "new property and rights," even when the toiler expends his labor on a predecessor's efforts. But if "new toil" produces "new property" in copyright, and thus restricts the reach of the underlying work's protection, it is not simply because the second comer has labored. There may also be the concern that exclusion of all other laborers except the first author, by means of a copyright extending to new and improved versions of the basic text, would not necessarily prompt the first author to undertake the greater toils of producing new and improved versions. In that case, there will be only the basic text; the fields of related endeavor will lie fallow. As the King's Bench recognized, this result disfavors both would-be laborers and the greater public who thereby would be deprived of novelty and improvement. The enlarged copyright, thus, would have the deleterious social effect of "put[ting] manacles upon science."

The scope of early copyright protection of informational works, then, was rather thin. It extended to the precise contribution of the first author, but generally not to significant variations that others might make on the underlying information. In modern copyright terms, early copyright jurisprudence recognized the right of reproduction, but not the right to make derivative works, that is, the right to control "other form[s] in which a work may be recast, transformed, or adapted."⁴⁵ Nonetheless, in one respect, the scope of early copyright protection for fact works was more generous than many courts allow today. Although copyright did not prohibit unauthorized remanipulations of data,⁴⁶ it could, at least in certain circumstances, be wielded against what one might call infringement by reference: use of the first compiler's data to save a competing second comer the research effort of consulting primary sources or of engaging in independent information-gathering.

Indeed, throughout the nineteenth and into the twentieth centuries—at the same time as the "personality" concept of copyright began to take shape—the courts showed increasing solicitude for plaintiffs' labors, and a corresponding disapproval of defendants' free riding on those labors. Thus, courts regularly sustained copyright plaintiffs'

45. 17 U.S.C. § 101 (1988) (1976 copyright act's definition of derivative work); cf. B. Kaplan, *An Unhurried View of Copyright* 17 (1967) (reviewing early English decisions and finding that "the infringement problem was being answered, seventy-five years after the basic statute [of Anne], by looking not so much to what the defendant had taken as to what he had added or contributed").

Professors Lyman Ray Patterson and Craig Joyce have characterized the narrow scope of early copyright protection as "a monopoly for competitive, market place purposes only ('monopoly for the market') and the broadened modern scope of protection as "a monopoly of the work per se or for all purposes ('monopoly of the work')." Patterson & Joyce, *supra* note 5, at 798.

For a more extensive treatment of the development of derivative rights, see Coldstein, *Derivative Rights and Derivative Works in Copyright*, 30 J. Copyright Soc'y 209 (1983).

46. See, e.g., Drone on Copyright, *supra* note 29, at 424–25.

claims against second compilers who failed to conduct independent canvasses of information. For example, in an 1875 decision concerning a compilation of New York State rules of court practice, a federal district court declared:

The rights and duties of compilers of books which are not original in their character, but are compilations of facts from common and universal sources of information, of which books, directories, maps, guide books, road books, statistical tables and digests are the most familiar examples, are well settled. No compiler of such a book has a monopoly of the subject of which the book treats. Any other person is permitted to enter that department of literature and make a similar book. But, the subsequent investigator must investigate for himself, from the original sources which are open to all. He cannot use the labors of a previous compiler, *animo furandi*, and save his own time by copying the results of the previous compiler's study, although the same results could have been attained by independent labor. The compiler of a digest, a road book, a directory, or a map can search or survey for himself in the fields which all laborers are permitted to occupy, but cannot adopt as his own the products of another's toil.⁴⁷

More succinctly, in an 1876 decision regarding financial news bulletins, a New York State court insisted:

It would be an atrocious doctrine to hold that dispatches, the result of the diligence and expenditure of one man, could with impunity be pilfered and published by another.

...
The mere fact that a certain class of information is open to all that seek it, is no answer to a claim to a right of property in such information made by a person who, at his own expense and by his own labor, has collected it.⁴⁸

Sweepingly summing up, Drone declared in 1879: it is "a fundamental principle of the law of copyright . . . that a work, to be free from piracy, must be the result of the author's 'own labor, skill, and use of common materials and common sources of knowledge open to all men.'"⁴⁹ The first author's copyright could compel a second author to retread the same ground, lest the second comer gain competitive advantage through reliance on his predecessor's research.⁵⁰

47. *Banks v. McDivitt*, 2 F. Cas. 759, 760 (C.C.S.D.N.Y. 1875) (No. 961).

48. *Kiernan v. Manhattan Quotation Tel. Co.*, 50 How. Pr. 194, 196-97 (N.Y. Sup. Ct. 1876) (property right in Associated Press foreign financial news).

49. Drone on Copyright, *supra* note 29, at 386 (quoting *Emerson v. Davies*, 8 F. Cas. 615, 624 (C.C.D. Mass. 1845) (No. 4436) (Story, J.)).

50. See, e.g., *Sampson & Murdock Co. v. Seaver-Radford Co.*, 140 F. 539, 540, 542-43 (1st Cir. 1905) (Boston city business directory: defendant made original canvass, then used plaintiff's directory for verification and went to original sources for confirmation; court enunciated principle that second comer cannot benefit by predecessor's expenditure of time, labor, and capital; in holding infringement, court emphasized that 20,000 names in defendant's directory (or 12%) were gathered from plaintiff's); *Trow*

These examples should suffice to indicate the longstanding practice of protecting information, *qua* information, when a rival engaged in what the courts perceived to be inadequate effort of its own. In effect, courts throughout the nineteenth and into the twentieth centuries readily reprimanded as copyright infringement conduct that came to be known as the broader unfair competition tort "misappropriation."⁵¹

Directory, Printing & Bookbinding Co. v. Boyd, 97 F. 586, 587 (C.C.S.D.N.Y. 1899) (injunction entered against directory compiler, some of whose canvassers, rather than conducting independent surveys, simply copied from plaintiff's directory); Farmer v. Elstner, 33 F. 494, 496 (C.C.E.D. Mich. 1888) (appropriation of historical data unique to plaintiff's scholarly work on history of Detroit by publisher of noncompeting work, an advertising directory for Detroit; injunction, limited to passages from plaintiff's work, awarded: "defendant has made numerous, but not very lengthy, excerpts from plaintiff's book. These excerpts, however, are from the most valuable part of his work, and contain facts which had never before been published and which were obtained from original sources, at very considerable labor and expense."); see also Dun v. Lumbermen's Credit Ass'n, 209 U.S. 20 (1908) (limitation of plaintiff's recovery to remedy at law when defendant had copied some listings from plaintiff's credit reports but had also engaged in such substantial, and costly, independent efforts that defendant's compilation contained more information than plaintiff's); cf. Edward Thompson Co. v. American Law Book Co., 122 F. 922 (2d Cir. 1903) (no infringement to use plaintiff's legal encyclopedia as source for case citations when defendant contributed its own commentaries and descriptions to citations; declaration: "If it be held that an author cannot consult the authorities collected by his predecessors, the law of copyright, enacted to promote the progress of science and useful arts, will retard that progress," 122 F. at 923, understood in context, concerns the leeway allowed diligent creators of substantially original works to rely on predecessors' efforts; the statement does not suggest that second comers may be dispensed from independent labors).

51. The classic misappropriation decision is *International News Serv. v. Associated Press*, 248 U.S. 215 (1918), in which the Supreme Court announced a federal general common law "quasi-property" right in the dissemination of information. At issue were news reports, published by AP on the East Coast, where they were copied by rival INS and relayed to INS' Midwest and West Coast papers, simultaneously or even ahead of their receipt by AP's local counterparts. The information was not copyrighted; AP had not complied with copyright formalities when it published the bulletins; moreover, "information respecting current events" was not subject to "the exclusive right for any period to spread the knowledge of [them]." *Id.* at 234. The "quasi-" quality of the right reflected the scope of its enforceability: according to the majority, the right might be effective against competitors, but not against the public at large. *Id.* at 236. In the course of the majority opinion, the Court invoked some agricultural metaphors that have remained firmly planted in the rhetoric of unfair competition. The Court declared:

[D]efendant . . . admits that it is taking material that has been acquired by complainant as the result of organization and the expenditure of labor, skill, and money, and which is salable by complainant for money, and that defendant in appropriating it and selling it as its own is endeavoring to reap where it has not sown, and by disposing of it to newspapers that are competitors of complainant's members is appropriating to itself the harvest of those who have sown.

Id. at 239-40. The actual holding of *INS* was fairly narrow: it granted AP protection against its competitor during the period of initial dissemination of the information to AP's members. On its facts, *INS* was a case of interference with publication. However, in part thanks to its fertile allusions, *INS* has come to stand for a general common law property right against "misappropriation" of commercial value. For a discussion of the development of *INS* as a general misappropriation doctrine, see Baird, Common Law

Whatever the label—copyright infringement, literary piracy, or unfair competition—the wrongful act consisted of reaping where one had not sown,⁵² whether or not the gleanings manifested authorial personality.

B. *Individuality and Authorship*

If late eighteenth and early nineteenth century Anglo-American courts tended to view original authorship as original labor, writers themselves were beginning to characterize original authorship as an expression of each author's individual personality. Favorite analogies appealed to perceived natural and physiognomical verities: just as nature crafts an infinite variety of creatures and faces, so each author's writings are distinct in their composition and insights. A few examples may convey the pervasiveness of the metaphor. In his 1759 polemic *Conjectures on Original Composition*, the poet Edward Young exhorted writers to be themselves, rather than to emulate slavishly their predecessors: "[B]y a spirit of imitation we counteract nature, and thwart her design. She brings us into the world all originals. No two faces, no two minds are just alike; but all bear nature's evident mark of separation on them."⁵³ Another English writer, George Colman, declared in 1775: "The wide field of nature gives a scope for that variety, which ever distinguishes an aera [sic] of genius. Never was there a period, wherein excellent authors flourished, but their several manners were as different as their faces"⁵⁴

Intellectual Property and the Legacy of *International News Service v. Associated Press*, 50 U. Chi. L. Rev. 411 (1983).

52. *International News Serv. v. Associated Press*, 248 U.S. at 239.

53. E. Young, *Conjectures on Original Composition* (1759), in 2 *The Complete Works: Poetry and Prose* 549, 561 (Nichols ed. 1854 & photo. reprint 1968). In a very similar vein, see L. Temple, Esq. (John Armstrong), *On Imitation*, in *Sketches or Essays on Various Subjects* 44, 44-45 (London 1758):

[I]f he sets up any one as a Pattern to be exactly imitated, his Behavior will grow constrained, stiff and affected. Such will be the constant success of so absurd an Attempt to confine the Variety of Nature; which plainly intends that Mankind should be distinguishable one from another by their Air, Voice, and Manner, no less than by their Faces.

See also F. Hargrave, *Argument in Defence of Literary Property* 6-7 (1774), quoted in Rose, *The Author as Proprietor: Donaldson v. Becket and the Genealogy of Modern Authorship*, 23 *Representations* 51, 72 (1988) ("a literary work *really* original, like the human face, will always have some singularities, some lines, some features, to characterize it, and to fix and establish its identity").

54. "The Gentleman" No. 6 (1775), in 1 *Prose on Several Occasions* 211 (London 1787), quoted in E. Mann, *The Problem of Originality in English Literary Criticism 1750-1800*, 18 *Philological Q.* 97, 115 (1939); see also Rev. J. Moir, *Originality in 1 Gleanings; or, Fugitive Pieces* 102, 104 (London 1785) ("original writers . . . perceive every object through a medium peculiar to themselves"). Years later, Ralph Waldo Emerson would propound a similar conceit:

[T]here remains the indefeasible persistency of the individual to be himself. One leaf, one blade of grass, one meridian, does not resemble another. Every mind is different; and the more it is unfolded, the more pronounced is that

The physiognomical conceit recurred when courts began to recognize an individual personality basis for copyright. Hence, in an 1854 House of Lords decision, one Law Lord proclaimed:

The order of each man's words is as singular as his countenance, and although if two authors composed originally with the same order of words, each would have a property therein, still the probability of such an occurrence is less than that there should be two countenances that could not be discriminated.⁵⁵

Justice Holmes set forth the most celebrated American judicial espousal of the "copyright as personality" approach in *Bleistein v. Donaldson Lithographing Co.*,⁵⁶ in which the Court rejected a challenge to the copyrightability of commercial art (a circus poster). The defendant had contended that a copyrightable work must rise to some level of aesthetic merit. Holmes found the source of authors' claims to protection in each creator's unique individuality:

[The work] is the personal reaction of an individual upon nature. Personality always contains something unique. It expresses its singularity even in handwriting, and a very modest grade of art has in it something irreducible, which is one man's alone. That something he may copyright unless there is a restriction in the words of the act.⁵⁷

The work may embody the author's persona, but how does it follow from determining that the work is "him" that it is also his? The personality approach enunciated by literary figures and judges appears

difference. . . . And what is Originality? It is being, being one's self, and reporting accurately what we see and are.

R.W. Emerson, *Quotation and Originality*, in 8 Works 169, 191 (1883).

55. *Jefferys v. Boosey*, 4 H.L.C. 815, 869, 10 Eng. Rep. 681, 703 (1854) (decision rejecting protection under English copyright law of alien authors first publishing in Great Britain; work at issue was Bellini's opera *La Sonnambula*) (Erle, L.J., discussing copyright as a form of property).

56. 188 U.S. 239 (1903).

57. *Id.* at 250.

If Justice Holmes did not repeat the physiognomical topos, his formulation does echo a different Romantic literary commonplace: the notion of the "original" work drawn from nature or experience as a "copy," and the imitation of the original as the "copy of a copy." Compare 188 U.S. at 249-50 ("Others are free to copy the original. They are not free to copy the copy. The copy is the personal reaction of an individual upon nature.") (citations omitted) with L. Temple, Esq., *supra* note 53, at 45:

It is true, that Education and Study are necessary to the Improvement of Genius; but to this Purpose it is sufficient to be familiarly acquainted with the greatest Masters, and the earlier in life the better. By this means, if you delight in them, and have any similarity with them, you will catch their Graces without affecting it; and your own original characteristic Manner will still distinguish itself. But if you study to form yourself upon them, you become only a Copy of a Copy.

See also E. Young, *supra* note 53, at 551 (distinguishing copying from nature and copying from other authors: "the first we call 'originals,' and confine the term 'imitation' to the second.").

to assume that the presence of authorial spirit in a work suffices to confer ownership rights in it. In a sense this approach begins from the same premise as the labor view of copyright. According to Locke, one owns the fruits of one's efforts because they are the "labour of his body, and the work of his hands"; hands and body are parts of oneself, and "every man has a property in his own person."⁵⁸ If every man owns himself, then Locke's "bodily continuity" concept⁵⁹ would also support the conclusion that the author owns those things in which his self may be found.

The notion of the possessive personality received vigorous articulation in United States legal theory shortly before Justice Holmes's *Bleistein* opinion. Samuel Warren and Louis Brandeis's 1890 article, *The Right to Privacy*,⁶⁰ argued that common law copyright, and its new corollary, privacy, found their source in rights of personality. Reviewing English common law copyright decisions protecting writers of letters and other unpublished works against their unauthorized public disclosure, Warren and Brandeis contended that vindication of literary property rights did not adequately explain the courts' results.⁶¹ The prevailing concept of literary property as encompassing rights to profit by one's writings did not respond to the claimants' actual concern "to be let alone," whatever the commercial value of their writings.⁶² Rather, copyright and privacy should both be seen "as a part of the more general right to the immunity of the person—the right to one's

58. J. Locke, *Second Treatise of Civil Government*, ch. V, § 27 (Gateway ed. 1955) (1690). For other philosophical sources of a personalist view of copyright, see, e.g., Hughes, *The Philosophy of Intellectual Property*, 77 *Geo. L.J.* 287, 330–50 (1989) (discussing Hegelian conception of personality justification).

Cf. Rose, *supra* note 53, at 73–75: "The effect of the [face] metaphor is to collapse the category [sic] of the work into that of the author and his personality." But this equation "traces in reverse the Lockean notion of the creation of property," the origins of which "are not located but deferred, transferred backward from the material possession to the individual's 'person.'" In legal as well as "in literary discourse the literary work was coming to be seen as something simultaneously objective and subjective. No longer simply a mirror held up to nature, a work was now above all the objectification of a personality." *Id.*

59. The term is Professor Margaret Radin's. See Radin, *Property and Personhood*, 34 *Stan. L. Rev.* 957, 965–66 (1982).

60. Warren & Brandeis, *The Right to Privacy*, 4 *Harv. L. Rev.* 193 (1890).

61. *Id.* at 200–01.

62. The federal copyright act in force at the time of the Warren and Brandeis article, Act of Dec. 1, 1873, ch. 3, § 4967, 18 *Stat.* 953, 957, 959–60, reprinted in *Copyright Enactments of the United States 1783–1906*, *supra* note 29, at 57 provided that:

Every person who shall print or publish any manuscript whatever, without the consent of the author or proprietor first obtained, if such author or proprietor is a citizen of the United States, or resident therein, shall be liable to the author or proprietor for all damages occasioned by such injury.

This statute appears to contemplate redress of monetary harm caused to the author (or, perhaps more likely, the publisher—hence the inclusion of the "proprietor") by a third party's preemptive printing and distribution of a manuscript awaiting publication.

personality.”⁶³ For Warren and Brandeis, the “right to one’s personality” both transcends property,⁶⁴ and, perhaps somewhat contradictorily, is embraced within the “right of property in its widest sense.”⁶⁵

Logically, the property-in-personality notion can be extended beyond the privacy right, which controls disclosures about oneself contained in one’s unpublished writings, to the literary property right, which controls *published* manifestations of oneself as revealed in one’s writings. The self-revelatory character of literary creation justifies the creator’s assertion of private property rights in the work when published as well as in the work before it is disclosed.⁶⁶ Warren and Brandeis’s quotation from Drone’s copyright treatise favors this proposition: “The very meaning of the word ‘property’ in its legal sense is ‘that which is peculiar or proper to any person; that which belongs exclusively to one.’ The first meaning of the word from which it is derived—*proprius*—is ‘one’s own’.”⁶⁷ Justice Holmes may well have been echoing these ideas when he stated that the “something irreducible which is one man’s alone” and that is present within even the most “modest grade of art” is the “something” to which the property rights of copyright attach.

63. Warren & Brandeis, *supra* note 60, at 207.

64. *Id.* at 205 (“The principle which protects personal writings and all other personal productions, not against theft and physical appropriation, but against publication in any form, is in reality not the principle of private property, but that of an inviolate personality.”).

65. *Id.* at 211 (“The right of property in its widest sense, including all possession, including all rights and privileges, and hence embracing the right to an inviolate personality, affords alone that broad basis upon which the protection which the individual demands can be rested.”).

66. *Cf. id.* at 209–10 n.1. Warren and Brandeis discuss an English decision, *Pollard v. Photographic Co.*, 40 Ch. D. 345 (1888), and contend that the court’s suggestion that copyright protection of photographs is a creature of statute is incomplete because statutory copyright covers only published works; for statutory copyright to be meaningful, there must be a prepublication “property in the thing”; copyright in published works thus depends on preexisting property rights in the work before it is disclosed. The source of that property would be the right of personality.

67. Warren & Brandeis, *supra* note 60, at 206 n.1 (quoting Drone on Copyright, *supra* note 29, at 6). It is clear that Holmes was directly familiar with Drone’s treatise, see discussion *infra* text accompanying notes 89–91.

Other late nineteenth century legal writers on copyright adopted the equation of self and ownership. See, e.g., R. Bowker, *Copyright: Its Law and Its Literature* 1–2 (1886):

There is nothing which may more properly be called property than the creation of the individual brain. For property means a man’s very *own*, and there is nothing more his own than the thought, created, made out of no material thing The best proof of *own*-ership is that, if this individual man or woman had not thought this individual thought, realized in writing or in music or in marble, it would not exist. . . . If Farmer Jones does not raise potatoes from a piece of land, Farmer Smith can; but Shakespeare cannot write “Paradise Lost” nor Milton “Much Ado”[.] . . . It was the very self of each, in *propria persona*, that gave these [works] form and worth.

One should next consider whether this change in the rhetoric and rationale for copyright protection corresponded to a change in the scope of protection. Arguably, the property rights arising from the presence of the creator's personality within the work should allow a depth of coverage that is no greater than the scope associated with the labor concept of authorship (as understood in the eighteenth and nineteenth centuries). After all, just as the labor approach would deny the status of infringement to laboriously produced variations upon prior works, so the personality approach might exculpate variations that manifested the second comer's personality. Under Justice Holmes's generous formulation, the variations need not be extensive to capture the second comer's persona. Indeed, the personality view might find more authorship in a lesser degree of variation than would the labor approach. As a result, one might expect that a personality basis of copyright would not expand the scope of copyright protection, and in particular, would not permit the author to control variations made upon her works.

In fact, however, in the course of the nineteenth century, the scope of copyright protection embraced an increasing range of activities. A review of the first hundred years of United States copyright enactments, from 1790 to 1891, shows a progression from rights simply in "printing, reprinting, publishing and vending,"⁶⁸ to the additional rights of "completing, copying, executing, finishing, and vending . . . and in the case of a dramatic composition, of publicly performing. . . . [a]nd authors may reserve the right to dramatize or to translate their own works."⁶⁹

Former Justice Kaplan has suggested that the changing status of authors in the nineteenth century, from imitative craftsmen to professionals conscious of their unique individuality, led in the nineteenth century both to increasing intolerance of copying and to disapproval of composition heavily dependent on predecessors' works.⁷⁰ This evolution in literary circles in turn produced an evolution in the scope of copyright protection toward coverage of abridgments, translations, and similar variations.⁷¹

Arguably, the expansion of copyright scope had at least as much, if not more, to do with contemporary economic pressures. If the first copyright statute was limited to "printing, publishing and vending"

68. Act of May 31, 1790, § 1 1 Stat. 124, reprinted in Copyright Enactments of the United States 1783-1906, *supra* note 29, at 32, 32.

69. Act of Dec. 1, 1873, § 4952, 18 Stat. 957, reprinted in Copyright Enactments of the United States 1783-1906, *supra* note 29, at 54. Moreover, the subject matter of copyright expanded from the 1790 Act's maps, charts, and books, to "any book, map, chart, dramatic or musical composition, engraving, cut, print, or photograph or negative thereof, or of a painting, drawing, chromo, statue, statuary, and of models or designs intended to be perfected as works of the fine arts." *Id.*

70. See B. Kaplan, *supra* note 45, at 22-25.

71. *Id.*

when it was enacted in 1790, the English-language book trade perhaps defined the relevant market for works of authorship. Subsequent statutory expansions would reflect, then, the recognition that substantial markets for translations and dramatizations also existed, or had developed.⁷² The reason for statutory expansion would derive to some extent from the labor theory of protection: having realized that the first authors' labors bear fruit through others' translations and dramatizations as well as through reproductions, Congress would have determined that these fruits should be reaped by the authors, rather than by third parties. But this rationale does not explain why third party translators and dramatists, who also labored, owe tribute to the initial authors. Some additional concept of the nature of initial authorship may be needed to fill the gap between protecting the first author's own labors, and prohibiting others from adding their labors to the first work. The personality concept of authorship may supply the link from reproduction rights to derivative work rights.

While a causal link between a personality perspective on authorship and a broader scope of rights may be difficult to prove, one at least can observe that contemporaneously with the rise and judicial acceptance of the personality approach came a different concept of what constituted the author's protectable creation. This concept pointed the way to extension of the scope of copyright protection from mere security against reproduction to control over derivative works as well. In an 1899 decision concerning Oliver Wendell Holmes, Sr.'s, *The Autocrat of the Breakfast Table*, the Supreme Court announced:

It is the intellectual production of the author which the copyright protects and not the particular form which such production ultimately takes, and the word 'book' . . . is not to be understood in its technical sense of a bound volume, but any species of publication which the author selects to embody his literary product.⁷³

72. With respect to the market for translations, the premise seems dubious. Already in 1790, there was a large German-speaking population, particularly in Pennsylvania, the state with one of the two largest United States publishing industries (the other was Massachusetts). See Federal Copyright Records 1790-1800, *supra* note 3, at 1-24 (cataloguing copyright deposits of eight German-language books in Pennsylvania—a total of fifty-one copyright deposits—from 1790 to 1793); I J. Tebbel, *A History of Book Publishing in the United States: The Creation of an Industry 1630-1865*, at 142 (1972) (high demand in post-Revolutionary period for English and German-language textbooks).

73. *Holmes v. Hurst*, 174 U.S. 82, 89 (1899). The Court determined that it was not infringement to reprint portions of a magazine in which chapters of Holmes, Sr.'s book had been published serially when the magazine in which the material first appeared had not been copyrighted. The Court rejected Holmes's argument that the copyright attached only to the book form in which his work ultimately appeared. Had the Court held that the serial publication of the work in magazine form was not a copyrightable "book," then the magazine publication would have had no bearing on the copyright status of the book. Because the Court held the serial publication to constitute publication of a "book," the magazine's noncompliance with copyright formalities cast Holmes's literary

The Court thus enunciated a conception of authorial creation in which the "intellectual production" exists independently of the medium of expression. This deincorporealizing conception—well understood in modern copyright law⁷⁴—ultimately affected the scope of protection. If the author's "product" would no longer be confined to any particular print manifestation of the work, and instead would be perceived as capable of inhabiting any of many forms, it followed that the copyright can cover any and all of the varying habitats, from bound volumes to pamphlets. It also followed that if the copyright protects the "intellectual production," regardless of the form of its embodiment, then a pamphlet version can infringe the bound volume.⁷⁵

The idealization of the intellectual production facilitates acceptance of the notion of dependent (and thus infringing) derivative works. Indeed, a few years later, in 1911, the Supreme Court, per Justice Holmes, took the next step toward bringing derivative works within the bounds of the author's copyright, holding that a film based on the novel *Ben Hur* was an infringement of the statutorily recognized right to dramatize.⁷⁶

The path from *The Autocrat of the Breakfast Table* to *Ben Hur* in fact traversed more ground than might initially appear. In the earlier decision, the Court supplied a conception of a "literary product" that permitted a broader scope of protection, but did not draw all the implicit conclusions. Rather, the Court held that the copyright might extend to the various formats in which the work might be presented, but it also indicated its view that the "literary product" encompassed no more than the author's choice and ordering of words.⁷⁷ Hence, the copyright would not cover substantive alterations to the work. With respect to *Ben Hur*, by contrast, the Court detached the "literary product" even further from its formal moorings. The Court confronted the defend-

work into the public domain. Subsequent publication in book form could not revive the copyright.

74. See, e.g., *Apple Computer, Inc. v. Franklin Computer Corp.*, 714 F.2d 1240 (3d Cir. 1983) (whether embodied in high-level source code, in binary language object code, on a disk, or embedded in ROM, a "computer program" as defined in § 101 of the 1976 Copyright Act is still a "computer program"), cert. denied, 464 U.S. 1033 (1984).

75. It should be noted that *Holmes v. Hurst*'s broad view of what constituted the "literary product" served to defeat Holmes, Sr.'s, copyright claim. See *supra* note 73.

76. *Kalem Co. v. Harper Bros.*, 222 U.S. 55 (1911).

Professor Paul Goldstein cites as the foundation for the author's emergent control over creation of derivative works *Daly v. Palmer*, 6 F. Cas. 1132 (C.C.S.D.N.Y. 1868) (No. 3552), which relied on the then-new statutory right of public performance of dramatic works to find an infringement in one play's tracking of another's scene in which a character, bound to a railroad track, is rescued in the nick of time from a rapidly approaching train. See Goldstein, *supra* note 45, at 213-14; see also B. Kaplan, *supra* note 45, at 31-32 (asserting that the Court may have been influenced by the defendant's "trying to work the lode of spectacular rescue that the plaintiff had proved to be rich in audience appeal").

77. *Holmes v. Hurst*, 174 U.S. at 86.

ant's argument that the prior decision would not permit extension of the copyright to film versions because the film did not reproduce the novel's words, but merely proceeded from the novel's ideas.⁷⁸ The Court's invocation of the statutory dramatization right permitted it to stretch the reach of the rights in the "literary product" beyond the realm of literature to other forms of expression of the author's elaborated ideas.⁷⁹

C. *Personality, Information, Investment, and Technology*

The discussion to this point has addressed the scope of copyright protection under the personality approach without particular reference to informational works. Indeed, the case law articulating a broader scope of protection concerned works of *belles lettres* in the form of a collection of Holmes, Sr.'s, observations and clever sayings, as well as fiction, rather than works of information.⁸⁰ The personality approach's broader scope of copyright may seem inapposite to low authorship informational works. One might surmise that if the personality approach extends copyright's scope, it also retracts copyright's subject matter. If works receive more protection against more uses that might be made of them because these uses appropriate the author's personality, it would also follow that the works at issue must clearly bear the stamp of authorship. Since the personality in low authorship informational works is less than apparent, the work would not qualify for inclusion in the subject matter of copyright.

In fact, however, one role performed by the personality approach was to *expand* copyright subject matter by dismissing challenges to the artistic merits of works. In *Bleistein v. Donaldson Lithographing Co.*,⁸¹ the Court upheld the copyrightability of a functional work, commercial art, which at the time suffered the kind of opprobrium sometimes cast today on a modern functional work—computer programs.⁸² Utility in art is as

78. *Kalem Co. v. Harper Bros.*, 222 U.S. at 62.

79. Cf. *Burrow-Giles Lithographic Co. v. Sarony*, 111 U.S. 53, 58 (1884) ("Congress very properly has declared these ['writings' in the constitutional sense] to include all forms of writing, printing, engraving, etching, &c., by which the ideas in the mind of the author are given visible expression."). The Court's statutory and constitutional construction concerned the range of copyrightable subject matter; the scope of infringement was not at issue.

80. See *supra* notes 73–76 and accompanying text.

81. 188 U.S. 239 (1903) (Holmes, J.); see *supra* notes 56–57 and accompanying text.

82. See, e.g., *J.L. Mott Iron Works v. Clow*, 82 F. 316, 318–19 (7th Cir. 1897), in which the court denied a copyright for a price catalogue for bathroom fixtures:

We discover nothing original in the treatment of the subject; it is merely the picture of the bath tub in ordinary use The question, therefore, which confronts us, is, were such things intended to be protected by the constitutional provision in question? The object of that provision was to promote the dissemination of learning, by inducing intellectual labor in works which would promote the general knowledge in science and the useful arts. It is not designed as

copyrightable as frivolity, and humility as copyrightable as grandiosity. But, one might rejoin, even handwriting, the humble example adduced by Justice Holmes, may seem more easily to fit his personality paradigm than some informational productions. Indeed, handwriting, whether beautiful or illegible, may well be one of the most intensely individualizing endeavors, or so graphologists presumably would assert.

Despite these observations, the newer focus on authorial presence did not compel exclusion from copyrightable subject matter of most works of information. First, in many instances, personal authorship could be found in the arrangement of the work's components, or in their selection.⁸³ Second, courts did not abandon the labor rationale for copyright protection, particularly when informative and instructive works were at issue.⁸⁴ Writing in 1912, one copyright commentator observed: "[T]he courts have construed the laws to cover in the widest sense any 'useful book.'"⁸⁵

Of equal significance, the rise of the personality approach did not eradicate the tendency to reprimand unauthorized reproductions as acts of "reaping where one had not sown." Rather, the newer approach afforded a means of restating the older rationale. In 1879 Drone had discussed a circuit court decision that found daily price quotations unworthy of any claim to promote the progress of science;⁸⁶ he criticized the decision for disregarding the commercial value of daily price quotations. Drone contended that "[t]he importance and value of the information . . . [in these works] are well recognized in the commercial world; and such publications are clearly within the principle on which copyright has been declared to vest in directories, calendars, statistical reports, &c."⁸⁷ He further opined: "[I]f it has merit and value enough . . . to be an object of piracy, it should also be of sufficient importance

a protection to traders in the particular manner in which they might shout their wares. It sought to stimulate original investigation, whether in literature, science, or art, for the betterment of the people, that they might be instructed and improved with respect to those subjects.

Cf. Samuelson, *CONTU Revisited: The Case Against Copyright Protection for Computer Programs in Machine-Readable Form*, 1984 Duke L.J. 663, 727-28, 741-53 (stressing functionality of machine-readable forms of software).

83. See, e.g., *List Publishing Co. v. Keller*, 30 F. 772, 773 (C.C.S.D.N.Y. 1887), in which the court stated that works such as the *Social Register*

are designed to provide a catalogue, in convenient form, of the names and addresses of a selected class of eligible persons. They are original to the extent that the selection is original. Their commercial value depends upon the judgment and knowledge of the author respecting the social standing and society relations of a limited class of the general public.

84. See, e.g., *Sampson & Murdock Co. v. Seaver-Radford Co.*, 140 F. 539 (1st Cir. 1905); *Trow Directory, Printing & Bookbinding Co. v. Boyd*, 97 F. 586 (C.C.S.D.N.Y. 1899).

85. R. Bowker, *Copyright: Its History and Its Law* 69 (1912).

86. *Clayton v. Stone*, 5 F. Cas. 999 (C.C.S.D.N.Y. 1829) (No. 2,872) .

87. Drone on Copyright, *supra* note 29, at 210.

to be entitled to protection.”⁸⁸ In essence, Drone argued that property rights rise out of and are justified by the commercial value of low authorship works. In the second proposition, he offered the more general (if perhaps circular) contention that copyright property is proven by the existence of literary theft.

Similarly, in his 1903 *Bleistein* opinion,⁸⁹ Justice Holmes echoed both of Drone’s low authorship themes. He extended Drone’s arguments for informational works to works of art. Justice Holmes also rejected the contention that works of popular art lacked aesthetic merit: “if they command the interest of any public, they have a commercial value—it would be bold to say that they have not an aesthetic and educational value—and the taste of any public is not to be treated with contempt.”⁹⁰ Holmes then adopted Drone’s second point: “That these pictures had their worth and their success is sufficiently shown by the desire to reproduce them without regard to the plaintiffs’ rights.”⁹¹ In melding low and high authorship reasoning, Holmes demonstrated the receptivity of copyright to both creativity and commercial value.

Thus, by the early twentieth century, United States courts and commentators had evolved two complementary rationales for copyright protection: copyright arose from, and protected against appropriation of, both the authorial personality present within a work and the labor and resources invested in it. When the work manifested an authorial presence, its scope of protection extended beyond reproduction to encompass at least some derivative works exploitations. But, if the derivative works right flows from the personality concept, the rationale for the right would not seem to apply to low authorship works. As a result, there would be no basis for expanding the scope of protection to prohibit revising, or even engaging in only modest copying of, low authorship works. Rather, the labor rationale that underlies low authorship copyright would exonerate hard-working second comers who add their own labors to information copied from a fact compilation.

In fact, although the labor rationale for copyright protection did not recede during the rise of the personality approach, the appeal of the “new toil” defense to copyright infringement appears to have diminished by the end of the nineteenth century. As a result of statutory expansions of the scope of protection,⁹² a second comer’s toil in creating a derivative version of a high authorship work, such as a translation or a dramatization, no longer secured exemption from liability. The courts demonstrated a similar protectionism when directly competing

88. *Id.* at 212.

89. *Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239 (1903) (Holmes, J.).

90. 188 U.S. at 252.

91. *Id.* (citing *Henderson v. Tompkins*, 60 F. 758, 765 (C.C.D. Mass. 1894)) (Holmes’s jump cite to *Henderson* includes that decision’s quotation from Drone on Copyright, *supra* note 29).

92. *Supra* note 69.

low authorship works were at issue. Thus, even substantial industriousness, such as the independent generation of eighty-eight percent of the listings in an address directory partially copied from the plaintiff's work, would not exculpate the rival.⁹³

The decreasing relevance of defendants' additional industriousness, and the continuing emphasis on protection of plaintiffs' labor and investment in the preparation of informational works, may reflect the influence of the expanded scope of high authorship copyright. That is, once accustomed to discounting the defendants' new toil in high authorship cases, courts may have continued to do so in low authorship cases, even though the personality rationale for expanded protection would have been lacking. More likely, however, the diminished impact of the new toil defense in low authorship cases reflects a different (or at least an additional) phenomenon, best understood in light of then-new technology. When mere copying was itself costly and time-consuming, the addition of independent elements or arrangements to a prior work constituted a significant incremental effort and contribution. Although United States printing technology improved throughout the nineteenth century,⁹⁴ the technological advances of the last decades of that century radically transformed the conditions of reproduction and dissemination. A Boston printer in 1888 evocatively portrayed the changes that had occurred during his career:

It was on a [hand] press, in 1840, that I first tried my hand as an apprentice, 2000 copies being considered a good day's work. On that same press, about 1843, I assisted in printing a sixteen-page octavo tract of 100,000 copies. . . . This was a formidable number to print on a hand press, for it took fifty days to print the edition. To-day, on a two-revolution press, we could print the edition in a little over five days, and on a [state of the art] machine in five hours! [A New York publisher] prints, cuts and folds 32 pages, 8vo., of the *Century Magazine* on [the same state of the art] machine at the rate of 3,000 copies an hour⁹⁵

Nine years later, *Publisher's Weekly* reported that a West Coast publisher

93. See *Sampson & Murdock Co. v. Seaver-Radford Co.*, 140 F. 539, 540 (1st Cir. 1905). There appear to be few cases involving uses of information in noncompeting works. But see *Farmer v. Elstner*, 33 F. 494, 497 (C.C.E.D. Mich. 1888) ("The chief difficulty we have met with in this case is the absence of testimony showing that plaintiff has been, or is likely to be, injured by defendant's publication; . . . it was not intended as a competing work in any sense of the term . . .").

94. See generally 2 J. Tebbel, *supra* note 72, at 655 (printing made radical progress between 1800 and 1890 because of inventions such as the cylinder press, continuous roll paper, and photochemical etching).

95. J. Wilson, *The Paper World* (1888), quoted in H. Lehmann-Haupt, *The Book in America* 137-38 (1939); see also *Publishers Weekly*, Nov. 1, 1890, at 642, 642 (improvements in typesetting machinery turned out as much work in a day as a hand press produced in a week). Improvements in paper production and the introduction of photomechanical reproduction also revolutionized the late nineteenth century printing and publishing industries. See, e.g., H. Lehmann-Haupt, *supra*, at 138-44.

had succeeded in typesetting, printing, and binding 10,000 copies of a 350 page book in six days.⁹⁶ Printers' achievements were joined by improvements in communicating information: the telegraph and teletype machines relayed information from coast to coast within hours.⁹⁷

As reproduction and dissemination of information became cheaper and faster, the ability of third parties to compete with initial compilers increased. The first compiler lost much of her prior lead time advantage. A zone of exclusivity limited to extensive verbatim copying thus risked decreasing the commercial value of the first compiler's copyright. As newer technology enabled second comers to save time and money in copying previously compiled information, the pressure increased to protect the information itself, even when second comers may have made additional efforts. The persistence of the "independent canvass" requirement reflects this pressure.⁹⁸

The nineteenth century expansion of copyright scope, then, reflected the different influences of the two concepts of copyright. In high authorship works, the right to control variations on and adaptations of a work stemmed from the author's personal right of self-determination, that is, to control the manifestations of himself in the various forms the work might assume. In low authorship works, the expansion of scope tracked the competitive advantages that new technology conferred on copiers. As the means of copying became faster and more effective, the quantum of copying leading to a finding of infringement diminished. But competition between low authorship works still defined the extent of protection.⁹⁹ In the nineteenth and early twentieth

96. Publishers Weekly, Oct. 9, 1897, at 615, 615.

97. See, e.g., *International News Serv. v. Associated Press*, 248 U.S. 215, 238-39 (1918) (AP wire service news bulletins copied and relayed by competitor INS on East Coast to INS's West Coast subscribers simultaneously with, or sometimes even before, West Coast arrival of bulletins to AP subscribers).

98. See decisions cited *supra* note 50; see also *Leon v. Pacific Tel. & Tel. Co.*, 91 F.2d 484 (9th Cir. 1937), in which the court, taking the importance of protecting the plaintiff's labor to its logical conclusion, granted protection against even noncompeting works incorporating plaintiff's gathered information: "[E]ven if [defendants] have injured the plaintiffs in no other way, they have at any rate deprived them of the advantage, which their copyright conferred on them, of being able to publish such a book as the defendants' book at much less labor and expense than anyone else." *Id.* at 487 (quoting *Weatherby & Sons v. International Horse Agency & Exch., Ltd.*, 2 Ch. 297, 304, 79 L.J. Ch. 609 (1910)).

The United States Supreme Court has recently granted certiorari in a decision holding the copyright in a telephone directory infringed when a subsequent compiler assembled its directory by copying and verifying some of plaintiff's listings, rather than by first conducting an independent canvass of the names and addresses in the area of telephone service. *Rural Tel. Serv. Co. v. Feist Publications, Inc.*, 663 F. Supp. 214 (D. Kan. 1987), *aff'd*, No. 88-1679 (10th Cir. Mar. 8, 1990), cert. granted, 59 U.S.L.W. 3209 (U.S. Oct. 1, 1990) (No. 89-1909).

99. See, e.g., *Drone on Copyright*, *supra* note 29, at 424-25 & n.1 (discussing "doctrine of new and different use," which permits copying of information "in illustration of new and original propositions, or for any other purpose not substantially the same" as

centuries, while copyright in a high authorship work covered adaptations for different markets, such as theatrical and motion picture exploitations, copyright in a low authorship work generally did not reach noncompeting works. As we turn to more recent controversies concerning low authorship works, the impact of new copying and distribution technologies, particularly the digital computer, continues to push some courts toward further stretching the scope of copyright protection for low authorship works of information to reach even noncompeting appropriations. At the same time, the opposite phenomenon appears to be occurring in other courts, where a high authorship, personalist concept of copyright subject matter and scope is displacing its former partner, the labor-investment approach. As a result, some low authorship works may not be protected at all, much less protected against noncompeting copying.

II. INFORMATIONAL WORKS IN CONTEMPORARY COPYRIGHT ANALYSIS

Recent controversies concerning low authorship informational works reveal rifts both in the conception of copyrightable subject matter and in the delineation of the scope of protection. With respect to the subject matter of copyright, many courts and commentators have given primacy to the personality concept of original authorship, thereby relegating the labor view to the extremes of historical anomaly¹⁰⁰ and discarding it in favor of a single, modern, subjective authorship criterion of originality.¹⁰¹ Those courts that do admit low

plaintiff's use: "There is no recognized principle which will prevent a subsequent compiler from copying common materials from an existing compilation, and combining them in a new form, or using them for a different purpose.") (citation omitted).

100. See, e.g., *Southern Bell Tel. & Tel. Co. v. Associated Tel. Directory Publishers*, 756 F.2d 801, 809 (11th Cir. 1985) (industriousness no longer a relevant criterion of copyrightability under the 1976 Copyright Act); *Miller v. Universal City Studios, Inc.*, 650 F.2d 1365, 1369-70 (5th Cir. 1981) (pre-1976 Act directory cases better viewed as "in a category by themselves"; copyright in directories now "properly viewed as resting on the originality of the selection and arrangement of the factual material, rather than on the industriousness of the efforts to develop the information").

101. See *Financial Information, Inc. v. Moody's Investors Serv., Inc.*, 808 F.2d 204 (2d Cir. 1986) (index cards bearing bond call information lack sufficient subjective authorship to qualify as original works of authorship), cert. denied, 108 S. Ct. 79 (1987); *Southern Bell*, 756 F.2d at 809 (directory meets § 102(a) originality requirement "where the directory is the product of subjective 'selection, organization, and arrangement of the preexisting materials'"); *Eckes v. Card Prices Update*, 736 F.2d 859 (2d Cir. 1984) (listing of baseball cards held copyrightable because subset of listings displayed subjective selection); *W. Patry*, supra note 10, at 63-64 (same standard of originality applies to fact collections as to other literary works); *Patterson & Joyce*, supra note 5, at 764 (compilation of court decisions should "express[] the 'unique personal reaction' of the compilation author upon the subject matter" to be copyrightable); Note, Copyright Protection, supra note 10, at 775; Comment, supra note 9, at 733. But see Jones, supra note 24, at 700-08 (criticizing Second Circuit imposition of a subjective creativity standard on compilers of fact works); cf. Olson, supra note 10, at 49-55, 61 (observing and criticizing Second Circuit decisions imposing "subjective standard" of originality for de-

authorship compilations into the company of copyrightable works often swathe their determinations in the rhetoric of high authorship. Thus, many courts will strain to find (or will simply declare the existence of) "selection and arrangement" in such patently nonselective and un-"arranged" compilations as, for example, geographically determined alphabetical address directories.¹⁰²

With respect to the scope of protection, courts have enunciated two positions. Ironically, this split of authority tends to disfavor high authorship informational works, such as narrative histories, while according vigorous protection to some low authorship informational works, such as address listings and directories. In the realm of high authorship, some decisions express fear of monopolization of historical or other facts, and therefore exclude from copyright's ambit all but the author's choice and ordering of words.¹⁰³ On the other hand, some courts acknowledge the low authorship of compilations such as address lists, yet extend copyright protection not merely to the information in the particular form presented in plaintiff's work, but to other formats that might be imposed upon the collected data.¹⁰⁴

In general, courts in this latter group admit that the primary bases for their rulings are the desire to avoid the economic harm to plaintiffs that would result from a contrary ruling, and the inclination to reprimand the free rider.¹⁰⁵ The concept of economic harm extends beyond direct competition, for at least some courts perceive that new technologies so facilitate not only copying but also preparation of derivative works that a scope of copyright protection for low authorship works limited to the plaintiff's initial format would afford little meaningful protection. Thus, underlying these decisions is the concern to preserve

ivative works, particularly variant reproductions of public domain art objects; claiming that, in effect, the court has imposed even higher, "true artistic skill," criterion of high authorship as prerequisite to copyrightability of these works).

102. See, e.g., *Hutchinson Tel. Co. v. Fronteer Directory Co.*, 770 F.2d 128, 132 (8th Cir. 1985) (sufficient authorship of white pages telephone directory established because plaintiff "solicited, gathered, filed, sorted, and maintained the information"); *Southern Bell*, 756 F.2d at 810; see also *West Publishing Co. v. Mead Data Cent., Inc.*, 799 F.2d 1219 (8th Cir. 1986) (protecting West's "arrangement" and pagination of legal reports), cert. denied, 479 U.S. 1070 (1987).

103. See, e.g., *Harper & Row, Publishers v. Nation Enters.*, 723 F.2d 195, 204 (2d Cir. 1983), rev'd on other grounds, 471 U.S. 539 (1985); *Hoehling v. Universal City Studios, Inc.*, 618 F.2d 972, 979 (2d Cir.), cert. denied, 449 U.S. 841 (1980).

104. See, e.g., *Illinois Bell Tel. Co. v. Haines & Co.*, 683 F. Supp. 1204 (N.D. Ill. 1988), aff'd, 905 F.2d 1081 (7th Cir. 1990) (holding copyrightable telephone directory listings where defendant rearranged entries according to address and phone number); *National Business Lists, Inc. v. Dun & Bradstreet, Inc.*, 552 F. Supp. 89 (N.D. Ill. 1982) (credit bureau's credit rating listings infringed where defendant produced mailing lists using information from listings); see also *Rockford Map Publishers, Inc. v. Directory Serv. Co.*, 768 F.2d 145 (7th Cir. 1985) (creation of map using boundary information from earlier map was copyright infringement), cert. denied, 474 U.S. 1061 (1986).

105. See, e.g., *National Business Lists*, 552 F. Supp. at 92; *Rockford Map*, 768 F.2d at 148.

copyright as an effective incentive to prepare these kinds of informational works.

A. *Subject Matter*

The United States Copyright Act of 1976 (the "1976 Copyright Act" or the "1976 Act")¹⁰⁶ governs copyright claims arising after 1977.¹⁰⁷ Part of the prevailing anarchy in the disposition of copyright suits involving low authorship works today may be attributed to what Congress did, or did not do, in enacting the new law. The 1909 Act included within its listing of categories of works registrable for copyright a specific mention of "directories, gazetteers, and other compilations."¹⁰⁸ This detailing of apparently low authorship works may have led some courts construing the 1909 Act to conclude that these works were copyrightable, without any further or precise showing of original—personal—authorship.¹⁰⁹

The 1976 Act eliminates specific mention of "directories" and "gazetteers," and instead sets forth general criteria of protectability. Under the present Act, "[c]opyright protection subsists . . . in original works of authorship."¹¹⁰ These include compilations,¹¹¹ defined as "work[s] formed by the collection and assembling of preexisting materials or of data that are selected, coordinated, or arranged in such a way that the resulting work as a whole constitutes an original work of authorship."¹¹² These provisions are not highly illuminating. Indeed, they are circular: in effect they say "original works of authorship include compilations, if the compilation as a whole constitutes an original work of authorship." Moreover, when the work is a compilation, it is not clear whether the current meaning of "original work of authorship" differs from its meaning under the 1909 Act.

Although the statute makes "original" "authorship" the keystone of copyrightability, it does not define these terms; instead, the legislative history claims to preserve the judicial standard evolved under the prior statute.¹¹³ That standard accommodated a range of low authorship works, both those whose investment of labor primarily justified protection,¹¹⁴ as well as those whose selection and organization of ma-

106. 17 U.S.C. §§ 101-810 (1988).

107. *Id.* § 301.

108. 17 U.S.C. § 5(a) (repealed 1976).

109. See, e.g., *Miller v. Universal City Studios, Inc.*, 650 F.2d 1365, 1370 (5th Cir. 1981).

110. 17 U.S.C. § 102(a).

111. *Id.* § 103.

112. *Id.* § 101. For a particularly close textual analysis of this provision, see Patry, *supra* note 9, at 25-27.

113. See H.R. Rep. No. 1476, 94th Cong., 2d Sess. 51 (1976) (original works of authorship "purposely left undefined"). For a discussion of the legislative history, see Patry, *supra* note 9, at 18-25.

114. See, e.g., *Jeweler's Circular Publishing Co. v. Keystone Publishing Co.*, 281 F.

terial could credibly be considered subjective.¹¹⁵ If Congress simply meant to embrace and incorporate prior case law regarding low authorship informational works, then arguably there would be no need to articulate a personal authorship basis for protecting these works. But many courts and commentators have construed the 1976 Act definition of compilations to impose the same standard of originality on low and high authorship works.¹¹⁶ For these authorities, the essential criteria are "selection" and "arrangement":¹¹⁷ these criteria implicitly import subjective determinations.

The Second Circuit, traditionally the premier copyright court, has been the most explicit in its adoption of a test of subjective authorship. Thus, it has denied copyright protection to index cards reporting daily bond information when the gathering of information for the cards was a "simple clerical task" requiring no exercise of judgment on the part of the compilers.¹¹⁸ The court rejected a grant of copyright protection "based merely on the 'sweat of the author's brow' [because this grant] would risk putting large areas of factual research material off limits and threaten the public's unrestrained access to information."¹¹⁹ Similarly, the Second Circuit struck out a "sweat" basis for copyright by holding that a price listing of 18,000 baseball cards was protected when a portion of the listing represented the compilers' subjective identification of the "best" baseball players.¹²⁰

It is not clear that the statute commands this rejection of the "sweat" test of authorship;¹²¹ nor, upon closer examination of the deci-

83, 88 (2d Cir.), cert. denied, 259 U.S. 581 (1922); *Triangle Publications v. New England Newspaper Publishing Co.*, 46 F. Supp. 198, 201 (D. Mass. 1942).

115. See, e.g., *Adventures in Good Eating v. Best Places to Eat*, 131 F.2d 809, 812-13 (7th Cir. 1942).

116. See, e.g., *Patry*, supra note 9, at 41; authorities cited supra note 101. But cf. *Hutchinson Tel. Co. v. Fronteer Directory Co.*, 770 F.2d 128, 131 (8th Cir. 1985) (observing that House Report accompanying 1976 Act lists directories as an example of a copyrightable work, and concluding that Congress intended to "ratify" prior cases holding directories copyrightable).

117. In *Rural Tel. Serv. Co. v. Feist Publications, Inc.*, 663 F. Supp. 214 (D. Kan. 1987), aff'd, No. 88-1679 (10th Cir. Mar. 8, 1990), cert. granted, 59 U.S.L.W. 3209 (U.S. Oct. 1, 1990) (No. 89-1909), the U.S. Supreme Court granted a writ of certiorari with respect to the following question:

Does the copyright in a telephone directory by the telephone company prevent access to that directory as a source of names and numbers to compile a competing directory, or does copyright protection extend only to the selection, coordination, or arrangement of those names and numbers?

118. See *Financial Information, Inc. v. Moody's Investors Serv., Inc.*, 808 F.2d 204, 206-08 (2d Cir. 1986), cert. denied, 108 S. Ct. 79 (1987).

119. *Id.* at 207.

120. *Eckes v. Card Prices Update*, 736 F.2d 859, 863 (2d Cir. 1984) ("We have no doubt that appellants exercised selection, creativity and judgment in choosing among the 18,000 or so different baseball cards in order to determine which were the 5,000 premium cards.").

121. See supra text accompanying notes 113-117.

sions, does it appear that the Second Circuit means it. As the Second Circuit's expressed concern to avoid "putting large areas of factual research off limits" demonstrates, the court has confused the question of copyright *scope* with its subsistence. In the bond card decisions, protecting the plaintiff's index cards against verbatim copying (the barest scope of copyright) would prohibit others neither from acquiring the same information elsewhere, nor from incorporating the plaintiff's bond call information in a different work. Indeed, the court itself has wavered with regard to the subsistence of copyright in nonsubjective compilations. The court indicated that had defendant copied the volume in which the daily bond cards were bound, rather than copying each daily card seriatim, infringement might have been found.¹²² Somehow, the sum of the collected cards would have amounted to more authorship than each card bearing five facts.¹²³

The court's disclaimer of "sweat" protection in the baseball card decision manifested a similar inconsistency. The court stated that "the sweat of a researcher's brow . . . does not merit copyright protection absent, perhaps, wholesale appropriation."¹²⁴ In other words, the copyrightability of "sweat" will depend on the extensiveness of the defendant's copying; true sloth and great greed on the defendant's part will confer copyright upon the plaintiff's otherwise unprotectable labor. The court's error in conflating copyrightability and infringement should be clear: a work is either copyrightable or not; it does not become copyrightable simply because it has been copied "wholesale." But the error is revealing: despite its invocation of a high authorship standard of copyrightability, the court cannot completely relinquish the labor basis for protection.¹²⁵

122. *Financial Information, Inc. v. Moody's Investors Serv., Inc.*, 751 F.2d 501, 505 (2d Cir. 1984) (earlier stage of litigation, reversing lower court's fair use finding and remanding for evaluation of copyrightability).

123. See *infra* text accompanying notes 146-148.

124. *Eckes*, 736 F.2d at 862.

125. Arguably, the Second Circuit might have preferred a misappropriation claim against gross copiers, but the preemption section of the copyright act, 17 U.S.C. § 301, and recent Supreme Court pronouncements, see *Bonito Boats, Inc. v. ThunderCraft Boats, Inc.*, 109 S. Ct. 971 (1989) (preventing state from providing patent-like protection against "plug mold" copying of unpatented boat hulls), may well foreclose this route.

There is a simpler way to achieve the Second Circuit's goal: acknowledge the copyrightability of the nonsubjective compilation, but limit the scope to verbatim copying in a directly competing work. This suggestion is not novel, but it seems so often to go unheeded that renewed recommendation may be warranted. Over twenty-five years ago, Professor Gorman, in an extensive analysis of judicial treatment of works of information, concluded that courts should

resolve the problems of full copyright protection under the rubric of infringement and fair use, rather than of copyrightability. This, in turn, will offer greater flexibility, enabling the courts to label as "infringement" those works which interfere unduly with the monopoly of the copyright holder without bringing a commensurate benefit to the public

Nonetheless, *should* a "sweat" work be considered an "original work of authorship"? Or can copyright subsist only in those works in which some authorial personality may be discerned? Historically, as we have seen, sweat holds a strong claim to original authorship. Moreover, the rise of the personality approach supplemented, rather than supplanted, the prior concept of original authorship. Is there good reason now to adhere exclusively to a personality concept of authorship?¹²⁶

One argument for abandonment of the "sweat" concept in favor of a unitary, personality-based approach to copyright would contend that today's "sweat" works in fact entail little strenuous endeavor. For example, the compiler of a name and address directory need no longer travel from door to door gathering information,¹²⁷ nor need she sift through and organize individual files into a handy index. Rather, the information may already be stored in a computer data base, available for organization by a computer program. If computers have now cast us into the antiperspirant era of information production, perhaps low authorship compilations no longer have a claim to copyright.¹²⁸

The above argument, however, would seem to apply to only those "sweat" works that required no one's perspiration; it does not challenge the copyrightability of those nonsubjective informational works that in fact prove labor-intensive. As a result, works that to all appearances are alike, such as two white pages directories, would receive different treatment, depending on the quantum of labor expended. This standard does not assist a third party in determining if she may copy from a work. Would that person be obliged to become a defendant (or a declaratory judgment plaintiff) in order to obtain the discovery requisite to learning how much original effort the plaintiff's work embodied? Note also that, under this approach, labor is not simply a justification

Gorman, Copyright Protection for the Collection and Representation of Facts, 76 Harv. L. Rev. 1569, 1603-04 (1963).

126. See, e.g., Note, Copyright Protection, *supra* note 10, at 764 (arguing that Constitution requires personality-based standard of originality); cf. Denicola, *supra* note 13, at 530 (contending that "collection" of data is act of original authorship because "[t]he collection owes its origin to the author as much as does the manner in which the collection is arranged").

127. Cf. *Jewelers' Circular Publishing Co. v. Keystone Publishing Co.*, 274 F. 932, 934 (S.D.N.Y. 1921) (L. Hand, J.) (labor-intensive fact-gathering process involved in compiling directory of jewelers and trademarks used by them), *aff'd*, 281 F. 83 (2d Cir.) (right to copyright gained by industrious collection and labor), *cert. denied*, 259 U.S. 581 (1922).

128. Moreover, if the computer-assisted nonsubjective compilation has an "author," is that person the person who instructed the computer to organize information within a given data base? Is that person the creator of the computer program that organized the compilation? Is it the compiler of the data base? Any combination of the above? See Samuelson, *Allocating Ownership Rights in Computer-Generated Works*, 47 U. Pitt. L. Rev. 1185, 1192 (1986) (advocating that person who uses program to generate new work, and not author of program, should be owner of computer-generated work).

for copyright; it becomes its *sine qua non*. Although the rule may once have been "for your labors, we will recognize a copyright," it becomes "without long labors, you have no copyright." But how does one identify and assess the quantum of labor prerequisite to copyright?¹²⁹ Should all expenditures of labor be treated alike? Or are some efforts more worthy, or more "sweaty," than others? These pragmatic and philosophical problems have led courts and commentators to reject attempts to impose a substantial labor prerequisite.¹³⁰

One consideration favoring the original authorship of impersonal, nonsubjective compilations, independent of the perspiration expended, focuses on the social benefits derived from their production.¹³¹ The social benefit justification assumes that copyright spurs the production of useful works that might not otherwise be created because the opportunities for recoupment of investment in an unregulated market seem too slim in light of the costs of production.¹³² Address lists, law reporters, and road atlases, for example, are all very useful works. They are no less useful today than in the eighteenth and nineteenth centuries, when the policies underlying copyright sought to encourage these endeavors. Copyright should remain available to prod the creation of these works. A corollary to the social benefit justification, however, might be: if the costs of production are low, then copyright may be unnecessary. As a result, one might object that the determination that certain works are socially desirable does not suffice to demonstrate that copyright is the appropriate means to ensure their creation, particularly if these works are less laboriously produced than they once were.

This observation demonstrates the need to clarify that the social benefit rationale justifies copyright not with respect to each work individually, but with respect to an overall system of production of works. Inclusion of low authorship compilations within the subject matter of copyright will *on the whole* promote the progress of knowledge, even if individual examples appear less than instructive, or might have been produced regardless of the availability of copyright. A social value justification applied individually would advance a new predicate for protection, requiring evaluation of a particular work's social benefit before

129. For example, would the Copyright Office be obliged to adopt regulations instructing the Examining Division to assess the applicant's labor and detailing how to conduct the assessment?

130. See, e.g., *Rockford Map Publishers, Inc. v. Directory Serv. Co.*, 768 F.2d 145, 148 (7th Cir. 1985), cert. denied, 474 U.S. 1061 (1986). Compare *Amsterdam v. Triangle Publications, Inc.*, 189 F.2d 104, 105 (3d Cir. 1951) (denying copyright to map compiled from preexisting sources rather than from compiler's surveying) with *United States v. Hamilton*, 583 F.2d 448, 450 (9th Cir. 1978) (rejecting *Amsterdam*). For criticism of *Amsterdam*, see Gorman, *supra* note 125, at 1572-76; Raskind, *supra* note 10, at 135-36; Whicher, *supra* note 10, at 289-92.

131. See, e.g., Gorman, *supra* note 125, at 1603 ("With fact works, courts should find 'originality' in the social contribution made by the accurate gathering, verification, and tangible representation of useful information.").

132. See, e.g., 1 P. Goldstein, *supra* note 17, at 4-5.

deeming it an original work of authorship. But particularized inquiries into social value tend to cast judges as critics and censors, a role alien to their function in copyright law.¹³³ For example, litigants might request courts to gauge the social value of trivia encyclopedias,¹³⁴ of directories arranged by order of the telephone numbers,¹³⁵ or of mailing lists.¹³⁶ Even if courts could articulate criteria to rule on the social value of these endeavors, application of the standards is unlikely to be predictable from court to court.¹³⁷ Whatever the abstract merits of particularized inquiry into the social benefit each low authorship work may confer, the idea does not lend itself well to implementation.¹³⁸

133. See *Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239, 251-52 (1903) (Holmes, J.).

Judges have not happily filled these roles in the context of obscenity either. See, e.g., *Mitchell Bros. Film Group v. Cinema Adult Theater*, 604 F.2d 852, 855-56, 861 (5th Cir. 1979), cert. denied, 445 U.S. 917 (1980).

134. See *Worth v. Selchow & Righter Co.*, 827 F.2d 569 (9th Cir. 1987), cert. denied, 485 U.S. 977 (1988).

135. See *Illinois Bell Tel. Co. v. Haines & Co.*, 683 F. Supp. 1204 (N.D. Ill. 1988), aff'd, 905 F.2d 1081 (7th Cir. 1990).

136. See *National Business Lists, Inc. v. Dun & Bradstreet, Inc.*, 552 F. Supp. 89, 92 (N.D. Ill. 1982).

137. For example, should a local mores standard govern the determination of social benefit? Cf. *Miller v. California*, 413 U.S. 15, 24-25 (1973) (applying community standards to determine whether a mailing constituted obscenity for first amendment purposes). Such deference to local conceptions of social utility would undermine the general copyright goal of securing uniform, nationwide protection for works of authorship. See *Mitchell Bros.*, 604 F.2d at 858 ("the copyright statute does not in other respects vary in its applicability from locality to locality"); 17 U.S.C. § 301 (1988).

Moreover, a work-by-work analysis again invites courts to draw elusive distinctions between the truly "sweaty" socially useful sweat works, such as maps created from original surveying (for which the copyright incentive is presumed to be essential), and their more coolly collected counterparts, such as maps created from data collected from a variety of published sources (for which copyright would arguably be superfluous). Cf. authorities cited *supra* note 130 (debating the quantum of effort needed to support copyright in a map, and generally disfavoring a rule limiting copyright to maximally sweaty maps).

138. In any event, it may not be necessary to debate the claims to "authorship" of many compilations even under a unitary copyright standard because many works will manifest some selection and arrangement. For example, the compilers may make subjective choices in selecting a listing of stocks they deem most representative of market trends, see *Dow Jones & Co. v. Board of Trade of Chicago*, 546 F. Supp. 113, 116-17 (S.D.N.Y. 1982), or a directory of favorite restaurants, see *Adventures in Good Eating v. Best Places to Eat*, 131 F.2d 809 (7th Cir. 1942). Like selection, arrangement of materials also denotes personality (or betrays bias): the placement of the information can reveal the importance the compiler assigns to that particular collection of data, or the relationship the compiler perceives between different elements of information. As an example of how organization of material both reveals the intentions of the arranger and colors the conclusions one draws from the material, compare the detailed tables of contents of several law school casebooks in a given field. While the books will contain many of the same decisions and statutory or regulatory texts, the structuring of the chapters will reflect the different perceptions the editors seek to impart.

Nonselective data bases might seem to present the problem particularly acutely. In a data base, such as a catalogue of all holdings of the Library of Congress, or an unanno-

B. *Scope*¹³⁹

Analysis of issues concerning breadth of coverage of subjective elements of high authorship works, such as individualized selection and arrangement of the work's components, is (or should be) the same whether the high authorship work is factual or fanciful.¹⁴⁰ Analysis of the scope of protection accorded low authorship works, however, is quite different. An infringement inquiry keyed to a personality concept of copyright will so tightly circumscribe the zone of protection around a low authorship work that only extensive verbatim copying would give rise to liability. This parsimony presses at least some courts and commentators to rupture the unitary copyright mold.¹⁴¹

tated compendium of all federal appellate court decisions, the compiler aims to be exhaustive, not selective. The utility of the data base is its comprehensiveness; selection according to subjective criteria or intuition would defeat the purpose. Moreover, since individual users interrogate the data base according to their own search criteria, arrangement of data would appear irrelevant. As a result, these works (which may well prove the most pervasive of information-bearing productions in the future) would seem to offer no opportunity for subjective expression.

A recent comment, however, has contended that organization of material within a data base requires substantial subjective judgment. See Note, Copyright and Computer Databases: Is Traditional Compilation Law Adequate?, 65 Tex. L. Rev. 993, 1010-16 (1987). Unlike print compilations, the serial arrangement of a data base is not of most importance, for the user does not consult the data base in order from start to finish. But, according to the Note author, the placement of data within the base reflects the arranger's judgment concerning which data are most likely to be consulted, and therefore should be most accessible to users, because "the location of data on the disk or in memory determines the time required to access the data." *Id.* at 1014.

As these examples illustrate, the occasion for insertion of subjective elements into the creation of an informational work may arise sufficiently often (be those elements subjective selection of material or its organization) that the real question with respect to copyright and works of information will in most instances not be to discern minimum "authorship," but to determine the proper *scope* of the copyright. To the extent that some compilations completely elude subjective characterization, the labor and social benefit theories of originality would justify at least inclusion of such works within copyright subject matter.

139. My discussion of copyright scope does not include examination of the fair use doctrine, 17 U.S.C. § 107 (1988). The discussion here implies a commercial appropriation of information; for-profit copying generally does not qualify for the fair use exemption. See, e.g., *Harper & Row, Publishers v. Nation Enters.*, 471 U.S. 539, 566-69 (1985); *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 451 (1984).

140. I have argued for coextensive treatment of subjective aspects of fact works and fiction elsewhere, see Ginsburg, *Sabotaging and Reconstructing History: A Comment on the Scope of Copyright Protection in Works of History After Hoehling v. Universal City Studios*, 29 J. Copyright Soc'y 647 (1982). But see *Landsberg v. Scrabble Crossword Game Players, Inc.*, 736 F.2d 485 (9th Cir.) (stating that different analyses apply to fact works and works of fiction), cert. denied, 469 U.S. 1037 (1984).

141. See, e.g., *Clark Equip. Co. v. Lift Parts Mfg. Co.*, 223 U.S.P.Q. (BNA) 944 (N.D. Ill. 1984) (articulating alternative "inventive arrangement" or "industrious collection" bases for copyright in compilations); *National Business Lists, Inc. v. Dun & Brad-*

Copyright protects against copying.¹⁴² For low authorship informational works, one may posit three different kinds of copying: 1) close copying of all or substantial portions of the work in the creation

street, Inc., 552 F. Supp. 89 (N.D. Ill. 1982); Note, Factual Compilations, *supra* note 10, at 933.

The pressure to restore a dual concept of copyright, recognizing both personality and commercial value bases for protection, is heightened under the 1976 Copyright Act. While state common law once afforded relief against certain kinds of appropriations of information, the preemption provision of the 1976 law, 17 U.S.C. § 301(b) (1988), seems to eliminate most state law protection of compiled information. As a result, federal copyright may now afford the only source of proprietary (noncontract) rights in information. I do not propose in this Article to examine the application of copyright preemption to information protection under state law. For discussions of Copyright Act preemption of state law misappropriation claims, see, e.g., Abrams, Copyright, Misappropriation, and Preemption: Constitutional and Statutory Limits of State Law Protection, 1983 Sup. Ct. Rev. 509; Goldstein, *supra* note 27, at 1110-13; Gorman, Fact or Fancy?: The Implications for Copyright, 29 J. Copyright Soc'y 560, 598-610 (1982); Shipley & Hay, Protecting Research: Copyright, Common-Law Alternatives, and Federal Preemption, 63 N.C.L. Rev. 125, 154-70 (1984).

There is a suggestion in the legislative history that state law claims against certain forms of misappropriation from data bases might survive preemption. See H.R. Rep. No. 1476, *supra* note 113, at 132. This suggestion, however, concerns a portion of the copyright revision bill that ultimately was not included in the statute. See generally A. Latman, R. Gorman & J. Ginsburg, Copyright for the Nineties 761-68 (R. Gorman & J. Ginsburg 3d ed. 1989) [hereinafter Copyright for the Nineties] (discussing the unsuccessful effort by Congress to provide guidance regarding preemption of common law).

The sources cited above addressed "vertical" federalism issues, that is, whether state regulation conflicts with federal regulation. State protection of information poses "horizontal," or sister-state, federalism issues as well. If not all fifty states will protect information, or not protect it, in the same ways, one state's regulation may disrupt another state's policies. This is particularly true if the state court does not limit the territorial reach of its remedy to the state's borders. But even this limited application of state law may as a practical matter have extraterritorial implications. A defendant's work travels in interstate commerce: keeping it out of the forum may be no easy task. The problem becomes even more acute if the defendant's work is not a hardcopy document, but is itself an electronic data base, furnished through interstate transmission of data by telephone, radio, or satellite signal. The forum cannot erect boundaries impermeable to such signals. The local injunction therefore becomes problematic. The injunction poses the potential for broad interstate effect: keeping phone or radio or satellite signals out of the state entails denial of access to all within the signal's reach. The extrusive character of the remedy in turn puts pressure on a court either to decline to recognize the state law claim, cf. *RCA Mfg. Co. v. Whiteman*, 114 F.2d 86, 89-90 (2d Cir. 1940) (declining to recognize asserted Pennsylvania law of equitable servitude arising out of "not for broadcast" labels on sound recordings when broadcast area also encompassed New York and parts of Canada), cert. denied, 311 U.S. 712 (1940), or to hold the state law federally preempted under the commerce clause, cf. *Capital Cities Cable, Inc. v. Crisp*, 467 U.S. 691 (1984) (holding preempted Oklahoma's prohibition on certain kinds of television advertising; since the broadcast signals came from out-of-state, Oklahoma's law necessarily affected all states receiving the broadcast signal).

142. 17 U.S.C. § 106(1) (1988) (exclusive right of reproduction). Copyright also includes exclusive rights to prepare derivative works, id. § 106(2), to distribute copies, id. § 106(3), and to perform and display the work publicly, id. § 106(4), (5). The derivative works right is closely related to the reproduction right; adaptations generally involve some degree of copying from the adapted work.

of a competing work; 2) use of the work as a "starting point" to save a competitor time, money, and effort; and 3) reproduction of substantial elements of information in the creation of a different, not directly competing work.

The 1976 Copyright Act precludes protection for certain components of an original work of authorship: "In no case does copyright protection for an original work of authorship extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery, regardless of the form in which it is described, explained, illustrated, or embodied in such work."¹⁴³ This denial of protection is generally construed to apply to facts as well.¹⁴⁴ If one takes the statute on those terms, then copying the fact compilation entirely or virtually entirely (Variant 1) would be an infringement because copyright extends to the totality of the work. On the other hand, using the work as a starting point for reference (Variant 2) may involve consultation of the work as a whole, but reproduction only of unprotected facts. Similarly, remanipulation of data (Variant 3) exploits the facts removed from the totality of the work. Thus, under the 1976 Act, there would be a finding of infringement only in the first case. In fact, however, some United States courts have sustained plaintiffs' infringement claims in all three instances.¹⁴⁵

143. *Id.* § 102(b).

144. See, e.g., *Harper & Row, Publishers v. Nation Enters.*, 471 U.S. 539 (1985); *Financial Information, Inc. v. Moody's Investors Serv., Inc.*, 751 F.2d 501, 504-05 (2d Cir. 1984); see also H.R. Rep. No. 1476, *supra* note 113, at 56-57 ("Copyright does not preclude others from using the ideas or information revealed by the author's work.").

145. See, e.g., (Variant 1): *Telerate Sys. v. Caro*, 689 F. Supp. 221 (S.D.N.Y. 1988) (contributory infringement by producers of program permitting users to "download" from plaintiff's data base); *Northwestern Bell Tel. Co. v. Bedco of Minn., Inc.*, 501 F. Supp. 299 (D. Minn. 1980) (preparation of rival yellow pages directory through reproduction of advertisements held infringing); (Variant 2): *United Tel. Co. of Mo. v. Johnson Publishing Co.*, 855 F.2d 604 (8th Cir. 1988) (using plaintiff's white pages phone directory as initial reference for updating competing white pages directory held infringement); *Rural Tel. Serv. Co. v. Feist Publications, Inc.*, 663 F. Supp. 214 (D. Kan. 1987) (preparation of white pages phone book by initial reference to plaintiff's directory rather than by independent canvass held infringing), *aff'd*, No. 88-1679 (10th Cir. Mar. 8, 1990), cert. granted, 59 U.S.L.W. 3209 (U.S. Oct. 1, 1990) (No. 89-1909); *Rockford Map Publishers, Inc. v. Directory Serv. Co.*, 768 F.2d 145 (7th Cir. 1985) (infringement by second map publisher who used first map as "template" for rival map, thus sparing time and expense of own research), cert. denied, 474 U.S. 1061 (1986); *National Research Bureau v. Kucker*, 481 F. Supp. 612 (S.D.N.Y. 1979) (infringement found when 300 of 900 listings in defendant's directory of shopping centers were gathered by "slipping" plaintiff's directory, i.e., by contacting persons listed in plaintiff's directory and inquiring if the information therein was correct); (Variant 3): *Illinois Bell Tel. Co. v. Haines & Co.*, 905 F.2d 1081 (7th Cir. 1990) (infringement found in rearrangement of name-organized telephone directory into address-organized directory); *National Business Lists, Inc. v. Dun & Bradstreet, Inc.*, 552 F. Supp. 89 (N.D. Ill. 1982) (infringement of credit ratings information by unauthorized extraction of business listings to compile address lists). But see *Worth v. Selchow & Righter Co.*, 827 F.2d 569 (9th Cir. 1987) (Variant 3: no infringement when producers of Trivial Pursuit game extracted material for trivia

One might analyze infringement by examining the originality of the copied portions. The more original the copied material, the more protection it should receive.¹⁴⁶ Although the statute appears to disqualify facts themselves from "original" status, the form in which the facts are embodied nonetheless may be original. In low authorship compilations, however, the "original" form is so minimal—from a unitary, high authorship, copyright perspective—that only the work in its entirety deserves the designation "original work of authorship." It would follow, therefore, that in this instance, the "original" element is not captured unless the copier takes virtually all of the work. This analysis explains how Variant 1 can be an infringement. This analysis, however, does not authorize findings of infringement in the other two Variants.

A variable concept of originality may yield a broader scope of protection against infringement of low authorship works. The entire work standard referenced above essentially rests on the unitary, personality-oriented scheme of copyright. The authorial persona behind a low authorship compilation may resist identification, but we are willing to assume it is somehow present in the work as a whole, either as a result of the entirety of the assembling of information,¹⁴⁷ or in the correlation of various elements of information.¹⁴⁸

A labor view of originality might enlarge the protective reach. If a second comer spares herself effort by using the first work as a starting point, infringement may have occurred even though the resulting second work may not have copied all or most of the first. Arguably, under an original labor approach, infringement would be found only if the copied or referenced material had itself been laboriously produced. But, if the plaintiff's labor carries a high copyright value, the defendant's lack of labor should be considered pertinent as well. This is the reverse of the copyright/labor coin. As the older decisions reveal, copyright can concern labor qua labor, both rewarding the plaintiff's industry and investment, and reprimanding the defendant's sloth or shortcutting.¹⁴⁹ Indeed, an important 1985 decision concerning maps

questions and answers from plaintiff's encyclopedia of trivia), cert. denied, 485 U.S. 977 (1988).

146. See Raskind, *supra* note 10, at 148–62 (recommending that originality be assessed with respect to particular kinds of works and that infringement be gauged accordingly).

147. See, e.g., *Financial Information, Inc. v. Moody's Investor Serv., Inc.*, 808 F.2d 204 (2d Cir. 1986), cert. denied, 108 S. Ct. 79 (1987); *supra* text accompanying note 123; Denicola, *supra* note 13, at 530.

148. See, e.g., *New York Times Co. v. Roxbury Data Interface*, 434 F. Supp. 217, 222 (D.N.J. 1977) (copyrightable element of directories and indexes is their correlation of listings); Note, *supra* note 138, at 1024.

149. See *supra* notes 45–52, 92–98 and accompanying text.

Arguably, a Variant 2 infringement by reference or a Variant 3 remanipulation may also be an infringement of the Variant 1 kind, i.e., the second comer may have made an exact copy of the prior work to start with, even though the finished product may not

condemned the use of the plaintiff's work as a "starting point," and proclaimed the irrelevance of the quantum of plaintiff's input of labor while branding the defendant's failure to undertake its own "industrious collection."¹⁵⁰ The court stated that even if the defendant had engaged in some labor, by copying the plaintiff's fact collection, the defendant still spared itself the labor that the plaintiff had to undertake.¹⁵¹

The classic labor concept would not, however, extend the scope of infringement to Variant 3, reuse of information in a new and different work. Unlike her indolent counterpart in Variant 2, here the second comer is adding substantial amounts of her own labor to the appropriated information. More significantly, she has not copied from her predecessor for the purpose of creating a *competing* work. By the same token, a social benefit concept of originality would not aid against creation of new combinations of different arrangements of the information, for the new work presumably also contributes to the progress of knowledge. As discussed earlier,¹⁵² even if the new work does not itself promote knowledge, the social benefit concept would still tolerate Variant 3 copying because, on the whole, permitting variations through remanipulating the selection or arrangement of previously collected information should yield a net gain in knowledge.

Courts nevertheless have stretched copyright protection to prohibit remanipulation of information when the information has been stripped of any trappings of authorial presence. In essence, courts that condemn this kind of copying seek to secure the first compiler's investment. Conceding that such broad protection "does not fit nicely into the conceptual framework of copyright," courts nonetheless observe that the real value, both economic and social, of many compilations lies in their

closely mimic its source. For example, the defendant might download plaintiff's entire data base into the defendant's computer memory, then extract the data and rearrange it. But in this instance, under a unitary copyright approach, the calculation of defendant's profits should be based only on the first copy, not on the subsequent versions. By contrast, a labor/investment view would permit award of damages for all of defendant's production, at least in a Variant 2 case. Cf. *Robert R. Jones Assocs. v. Nino Homes*, 858 F.2d 274, 280-81 (6th Cir. 1988) (architectural plans, but not buildings, are copyrightable subject matter; nonetheless, in awarding damages for defendant's unauthorized copying of plans, court takes value of completed structure into account).

150. *Rockford Map Publishers, Inc. v. Directory Serv. Co.*, 768 F.2d 145, 149-50 (7th Cir. 1985), cert. denied, 474 U.S. 1061 (1986); accord *Schroeder v. William Morrow & Co.*, 566 F.2d 3, 6 (7th Cir. 1977).

151. See *Rockford Map*, 768 F.2d at 149: "Directory Service tells us that it did not infringe because its agent, too, was industrious. This is irrelevant. The infringement comes from the fact that Directory Service copied Rockford Map's output, not from the fact that it ended with a different plat map." The second map at issue contained all the same information as the plaintiff's (including planted errors), and did not add new information; moreover, defendant's work directly competed with plaintiff's; see decisions discussed *supra* notes 92-98 and accompanying text.

152. *Supra* text accompanying notes 132-133.

collection of information, not its arrangement. If [the compiler's] protection is limited solely to the form of expression, the economic incentives underlying the copyright laws are largely swept away. . . . [Moreover, given the manner in which information is stored in] automated electronic compilations . . . an emphasis upon arrangement and form in compilation protection becomes even more meaningless than in the past.¹⁵³

In effect, by declining to cast copyright protection in the form and arrangement mold, and by recognizing the commercial value of the gathered facts themselves, this analysis rejects the unitary, personality-based concept of authorship.

This view contrasts with many courts' approaches to protecting information contained within *high* authorship informational works such as histories, biographies, and news reports. Here most courts emphasize the Copyright Act's prohibition of protection for facts and ideas. As a result, they significantly curtail the scope of protection. For example, the Second Circuit has proclaimed:

[T]he protection accorded to the copyright holder has never extended to history, be it documented fact, or explanatory hypothesis. . . . [T]he scope of copyright in historical accounts is narrow indeed, embracing no more than the author's original expression of particular facts and theories already in the public domain. . . . "[T]here [can be no] copyright in the order of presentation of the facts, nor, indeed, in their selection."¹⁵⁴

Underlying this stingy allocation of protection is the court's fear of diminishing the "harvest of knowledge" to be reaped from histories and biographies.¹⁵⁵ But the court's means of crop protection includes pruning even the historian's *personal* contributions, such as her choice and ordering of events to recount, from the scope of infringing copying.¹⁵⁶

Juxtaposed, these high and low authorship cases seem to say: "The more a history book's exposition of fact is like a phone book's,

153. *National Business Lists, Inc. v. Dun & Bradstreet, Inc.*, 552 F. Supp. 89, 92, 97 (N.D. Ill. 1982); see also *Denicola*, *supra* note 13, at 531 (If a data base "is to be afforded copyright protection, it must of necessity attach to the assemblage of information itself.").

154. *Hoehling v. Universal City Studios, Inc.*, 618 F.2d 972, 974, 978 (2d Cir. 1980) (quoting *Myers v. Mail & Express Co.*, 36 C.O. Bull. 478, 479 (S.D.N.Y. 1919)), cert. denied, 449 U.S. 841 (1980); accord *Landsberg v. Scrabble Crossword Game Players, Inc.*, 736 F.2d 485, 488-89 (9th Cir.), cert. denied, 469 U.S. 1037 (1984); *Harper & Row, Publishers v. Nation Enters.*, 723 F.2d 195, 202-04 (1983), rev'd on other grounds, 471 U.S. 539, 545-46 (1985). See generally *Francione*, *supra* note 10, at 527-30 (rejecting totality approach in which unprotectible factual elements receive protection by being combined with copyrightable material). But see *Nash v. CBS*, 691 F. Supp. 140, 143-44 (N.D. Ill. 1988) (holding elaborated historical hypothesis copyrightable).

155. *Harper & Row*, 723 F.2d at 197.

156. See, e.g., *Harper & Row*, 736 F.2d at 202-04; *Hoehling*, 618 F.2d at 978.

the more protection the information may receive." Ironically, the strength of protection grows in inverse proportion to the amount of the work's personal authorship. It is true that high authorship informational works, such as histories, have literary value independent of the facts conveyed, while any authorial "style" that may be comprised in a low authorship phone book is essentially irrelevant to its basic value as a source of information.¹⁵⁷ But this observation simply means that copyright does not protect information unless information is the only thing of value in a work, in which case copyright may protect information extensively.

Nonetheless, this result may not be as anomalous as it appears. Indeed, it is anomalous only if one subscribes to a unitary, high authorship model of copyright law. However, since copyright should concern not only authorial personality, but also labor and investment, protection of information of commercial value in works of low authorship is as much a part of a nonunitary copyright scheme as is protection of the subjective expression of novels and plays. Admittedly, the early "sweat work" precedents may not supply a complete basis for a commercial value model of low authorship copyright. While they reprimand slothful usurpation of a first comer's time, money, and effort, they do not condemn remanipulation of information in the creation of a new and different compilation. But the narrower scope of protection those decisions afford may reflect the then-current state of copying technology as much as solicitude for productive defendants. If, as the later decisions muting the importance of defendant's industriousness indicate,¹⁵⁸ an important rationale for "sweat" copyright was the protection of first compilers' labor and investment, then one may contend that today's copying technology urges a broader scope of protection for gathered facts. As modern observers have cautioned, given the ease with which computers may copy and reorganize information, failure to protect the facts themselves deprives the compiler of a meaningful incentive to production.¹⁵⁹ Articulation of an expanded scope of protection for information contained in low authorship works thus requires further examination of the incentive structure of modern copyright law.

C. *Information and Incentives*

1. *Economic Arguments for a Broad Scope of Protection for Low Authorship Works.* — Under a commercial value view of copyright in information, derived from the Constitution's authorization to Congress to grant exclusive rights as a means "To promote the Progress of Science,"¹⁶⁰

157. See Gorman, *supra* note 141, at 586.

158. See *supra* notes 45–52, 92–98 and accompanying text.

159. See *supra* note 153 and accompanying text; OTA Report, *supra* note 15, at 102–04 (these "technologies are making the old definitions of 'rights,' 'infringements,' and 'fair use' ambiguous and largely obsolete").

160. U.S. Const., art. I, § 8, cl. 8.

copyright is an incentive to create works enhancing knowledge.¹⁶¹ The incentive rationale assumes that copyright is needed to prompt authors to undertake creative labors.¹⁶² Because many works whose production would enhance knowledge may betray an authorship more plodding than inspired, the works most in need of the copyright inducement are those in which personal authorship is least apparent. Personal authorship may be quite irrelevant to the inquiry into incentives; indeed, the less art the work manifests, the greater may be the need to supply an external prompt to the author's preparation. Perhaps some poets may toil for little more than fame;¹⁶³ the same seems unlikely for the great run of more prosaic compositions.

Just as an incentive perspective may welcome the most scantily authored works into the subject matter of copyright, so it may accord them a vigorous scope of protection. This statement may seem surprising at first: opponents of copyright protection have wielded incentive analysis to limit copyright coverage and scope. If copyright's role is to encourage the creation of works, then copyright should subsist only when encouragement is in fact needed, these detractors would argue.¹⁶⁴ But this approach to copyright incentives starts from the premise that protection is undesirable; it places the burden of proof on

161. But see Kauffman, *Exposing the Suspicious Foundation of Society's Primacy in Copyright Law: Five Accidents*, 10 Colum.-VLA J.L. & Arts 381, 405 (1986) (examining language and background of constitutional copyright clause: "there was no conscious attempt to impose a public purpose on copyrights").

162. *Mazer v. Stein*, 347 U.S. 201, 219 (1954); Hughes, *supra* note 58, at 302-05. The incentive rationale appears more central to twentieth century copyright analysis than to eighteenth or nineteenth century copyright thought. See *supra* note 29. For example, Drone justifies copyright protection on the grounds of a natural right arising out of the labor of intellectual creation, see Drone on Copyright, *supra* note 29, at 5-6; see also Yen, *Restoring Natural Law: Copyright as Labor and Possession*, 51 Ohio St. L.J. 517, 524-46 (1990) (criticizing economic analyses of copyright, and discussing early United States natural law bases for copyright).

163. See, e.g., Lord Camden speaking before Parliament in 1774:

Glory is the reward of science, and those who deserve it scorn all meaner views: I speak not of the scribblers for bread, who tease the press with their wretched productions It was not for gain, that Bacon, Newton, Milton, Locke, instructed and delighted the world; it would be unworthy [of] such men to traffic with a dirty bookseller for so much [as] a sheet of letter press. When the bookseller offered Milton five pound for his *Paradise Lost*, he did not reject it, and commit his poem to the flames, nor did he accept the miserable pittance as a reward for his labor; he knew that the real price for his work was immortality, and that posterity would pay it.

17 Parl. Hist. Eng. 953, 1000 (1774). A nineteenth century observer noted that according to Walpole's *Memoirs of George III*, iv.45, Lord Camden enjoyed an extremely comfortable annual income of 13,000 pounds when he espoused his "lofty view of the position of authors." Letters of David Hume to William Strahan 276 (G. Hill ed. 1888).

164. See, e.g., Breyer, *The Uneasy Case for Copyright: A Study of Copyright in Books, Photocopies, and Computer Programs*, 84 Harv. L. Rev. 281, 291 (1970); Plant, *The Economic Aspects of Copyright in Books*, 1 *Economica* 167, 170-71 (1934); see also Gordon, *An Inquiry into the Merits of Copyright: The Challenges of Consistency, Consent, and Encouragement Theory*, 41 Stan. L. Rev. 1343, 1438-46 (1989) and works

copyright proponents to demonstrate that *any* protection is warranted. A somewhat different approach to incentives, propounded by Professor Landes and Judge Posner,¹⁶⁵ seems to assume that some protection is appropriate, and inquires how much protection will yield the greatest production of works by first authors, as well as by second authors borrowing from their predecessors.

Professor Ralph Brown has emphasized that the Constitution's copyright clause seeks to promote knowledge; it "does *not* say 'to maximize returns to authors and inventors.'"¹⁶⁶ Maximizing authors' returns, however, may furnish the most likely route to promoting knowledge: "The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that encouragement of individual effort by personal gain is the best way to advance public welfare"¹⁶⁷ Furthermore, maximizing authors' returns does not mean that the author's reward comprises a complete monopoly over a work. For example, Landes and Posner would not extend copyright control to *independently* generated versions of the same work.¹⁶⁸ Nor would they eliminate the idea-expression dichotomy—the copyright doctrine that limits a work's protection to its particular presentation of ideas and concepts, but precludes protection for the ideas themselves.¹⁶⁹ In both cases, allowing the subject matter of copyright coverage to extend beyond these limits would risk choking off the creations of other authors. Unlike many economic analysts of copyright, however, Landes and Posner address the author's economic interest in control over derivative works, and conclude that the scope of the copyright monopoly properly extends beyond mere reproduction to comprehend the various ways in which a work may be recast or transformed.¹⁷⁰ The case for the first producer's rights in subsequent derivative works is important to my examination of copyright scope for low authorship works of information: an argument for securing to compilers the fullest control over the various remanipulations that may be made of data they have gathered is an argument for exclusive rights

cited and extensively discussed therein (concerning the "encouragement theory" of copyright).

165. Landes & Posner, *An Economic Analysis of Copyright Law*, 18 J. Legal Stud. 325, 341–44 (1989); see also Oppenheim, *The Public Interest in Legal Protection of Industrial and Intellectual Property*, 40 Trademark Rep. 613 (1950) (criticizing premise that intellectual property rights, as a form of limited monopoly, contravene the public interest, and proceeding from the assumption that private property rights in intellectual creations are in the public interest).

166. Brown, *supra* note 23, at 592.

167. *Mazer v. Stein*, 347 U.S. 201, 219 (1954).

168. Landes & Posner, *supra* note 165, at 344–47.

169. *Id.* at 347–53; see also R. Posner, *Law and Literature: A Misunderstood Relation* 341–42 (1988) (endorsing the idea-expression dichotomy).

The idea-expression dichotomy is codified at 17 U.S.C. § 102(b) (1988). See *supra* notes 143–144, *infra* notes 184–195 and accompanying text.

170. Landes & Posner, *supra* note 165, at 353–57.

in derivative versions of the data. The argument thus is aided by examining the economic justification for derivative works rights.

Landes and Posner's case for vesting first authors with control over derivative works does not rely on the role that these rights may play in recouping the author's investment.¹⁷¹ Rather, they start from the proposition that derivative works are themselves copyrightable because they can require considerable effort to produce. Copyright protection is therefore necessary to encourage the creation of works based on prior works. The first author, rather than the author of the derivative work, should be able to control the derivative works rights, Landes and Posner continue, because unfettered derivative works production could interfere with the first author's marketing of the underlying work. The first author might delay release of the underlying work until she had licensed as many derivative works as possible.¹⁷² For Landes and Posner, then, vesting control in the first author over derivative versions to be made of the initial work favors the production and exploitation of these versions.

Another reason (not developed by Landes and Posner) to recognize derivative works rights concerns the incentives to produce the initial work.¹⁷³ Potential derivative works exploitations are often taken into account in the decision whether to make the initial investment in a

171. *Id.* at 354. On this point, see *infra* text accompanying notes 173-176.

172. Landes & Posner, *supra* note 165, at 354-55.

Landes and Posner also suggest that dividing control over derivative works would increase third parties' transactions costs by requiring them to seek permission from both the first and second authors in order to exploit a derivative work. *Id.* at 355. If these authors mean to suggest that the Copyright Act's current administration of the derivative works right vests all control over exploitations of *created* derivative works in the underlying author, the suggestion may be somewhat misleading. Under the copyright law, a third party wishing to exploit a derivative work (made with the underlying copyright owner's authorization) would seek a license from the *derivative works* author. To the extent that the derivative works author did not acquire rights from the underlying author to license particular exploitations, the third party would need to seek permission from the underlying author as well. See, e.g., *Filmvideo Releasing Corp. v. Hastings*, 668 F.2d 91 (2d Cir. 1981) (when author of underlying novel did not transfer television rights, would-be broadcaster of film could not televise the work without underlying author's permission); *Gilliam v. American Broadcasting Cos.*, 538 F.2d 14 (2d Cir. 1976) (when authors of underlying script did not grant television producer right to edit script, producer could not independently authorize broadcaster to edit program).

173. Cf. Kitch, *The Nature and Function of the Patent System*, 20 J.L. & Econ. 265, 283 (1977) (a broad scope of control over use of patents will "increase the security of the investment process necessary to maximize the value of the patent"); but cf. Merges & Nelson, *On the Complex Economics of Patent Scope*, 90 Colum. L. Rev. 839, 843 (1990) (maintaining that it is an "open question" whether "granting broad scope to an initial inventor induces more effective . . . invention"). Although the Kitch article does not explicitly address copyright in information, it does indicate that the desirability of "property rights in all technological information . . . depend[s] on the assumption that investment in the search for ways to enhance the value of the information is needed." Kitch distinguishes between "static, known information" and information that the claimant created or "invested in its improvement." Kitch, *supra*, at 283. I would suggest that

work's creation.¹⁷⁴ For example, hardcover sales of a book may not generate enough revenues to recoup its advance, but subsidiary rights (including magazine serial and film rights) may prove the real source of income.¹⁷⁵ Moreover, the proceeds from control over exploitation of derivative works rights may permit a certain amount of cross-subsidization within the publishing industry: the derivative works profits left over after recoupment of the initial investment may go toward the production of a new work whose success may be more risky.¹⁷⁶ A broad scope of protection, thus, may favor the broader production of works; this in turn bears out the constitutional pairing of copyright protection with the advancement of knowledge.

The economic case for derivative rights, albeit developed in the context of high authorship works, also may apply to control over remanipulations of information in low authorship works. Investment in creating a telephone directory, for example, may be discouraged if the compiler's control reached only the initial format imposed upon the data because the scope of protection would not capture the full value of the work. The value of the directory extends to other uses that might be made of the information, such as rearranging it by address rather than by name,¹⁷⁷ or creating sub-directories of commercial listings.¹⁷⁸ The compiler could not anticipate recouping initial costs through licensing or selling derivative versions, and thus either might not undertake the initial work or might stint on its production.

Furthermore, even the creation of remanipulated compilations

information—whether or not previously “known”—once gathered and systematized in a data base is at least “improved,” if not “created.”

174. As Professor Paul Goldstein has observed, the derivative works right “enables prospective copyright owners to proportion their investment in a work's expression to the returns expected not only from the market in which the copyrighted work is first published, but from other, derivative markets as well.” Goldstein, *supra* note 45, at 216.

175. See Frase, Comments on Hurt & Schuchman, *The Economic Rationale of Copyright*, 56 *Am. Econ. Rev. (Papers & Proc.)* 435, 437 (1966) (“for many years now the American production of adult trade books taken as a whole—general books in hard cover in original or substantially revised editions—has resulted in a loss made good by a small profit on the subsequent sale of rights, principally to book clubs and paperbacks”). See generally Marks, *Subsidiary Rights and Permissions*, in *What Happens in Book Publishing* 230 (C. Grannis ed. 1967) (while subsidiary rights used to be source of extra income, they have become essential component of book publishing venture—often representing difference between profitable and unprofitable expectations).

176. Cf. Ladd, *The Harm of the Concept of Harm in Copyright*, 30 *J. Copyright Soc'y* 421, 431 (1983) (“By limiting potential rewards in the copyright market—. . . by . . . refusing to extend copyright to new uses . . . —the entrepreneurial calculus which precedes risk-taking in authorship and publishing is shifted in the direction of not taking a chance, i.e., not writing or publishing a ‘risky’ work, whether ideologically or economically risky.”).

177. See, e.g., *Illinois Bell Tel. Co. v. Haines & Co.*, 905 F.2d 1081 (7th Cir. 1990); cf. *Leon v. Pacific Tel. & Tel. Co.*, 91 F.2d 484 (9th Cir. 1937) (finding infringement by directory reorganizing alphabetical phone listings to numerical by phone number).

178. Cf. *National Business Lists, Inc. v. Dun & Bradstreet, Inc.*, 552 F. Supp. 89, 94 (N.D. Ill. 1982) (infringing use of plaintiff's credit reports to generate mailing lists).

could be discouraged were rights over derivative works outside the first compiler's prerogative. Demonstrating this counter-intuitive suggestion requires some elaboration. The remanipulated compilation might itself be a copyrightable work.¹⁷⁹ If control over this copyright were awarded to the derivative work author rather than the first author, the exploitation of the derivative work could interfere with the exploitation of the first work. This assertion initially may seem surprising: the initial directory and remanipulated versions would appear to coexist comfortably, with control over exploitations separately administered.¹⁸⁰ A directory organized by address may not jeopardize the sales of a directory organized by name of telephone subscriber if the two works serve different markets. In this case, even though the producer of the name directory might have wished to control the address market, sales of the address directory should not disrupt the name directory market.

Nonetheless, the address directory does pose the potential to undermine the exploitation of the name directory. A third party could "reverse engineer" the address directory to generate another, competing name directory. Recall that independent generation is not copyright infringement.¹⁸¹ Copying the name directory to produce another name directory falls squarely within the reproduction right. By contrast, if the derivative work address directory owes no tribute to the initial name directory, copying a derivative work address directory to generate a name directory identical to the underlying work would be like acquiring the information from public domain sources. A derivative work whose exploitation escaped the underlying author's control, then, might compromise the underlying work. By the same token, were remanipulations of information free from the claims of the source work, the copyright in the remanipulation might serve little purpose: a third party could revise the name directory to create a new address directory to compete with the first derivative address directory. When one realizes that the sauce for the information-gathering goose also covers the information-revising gander, both initial compilers and remanipulators are better off with extensive copyright protection for the initial work.

This justification lacks empirical demonstration, but so do economic arguments premised on the undesirability of copyright protection.¹⁸² The point here is that plausible economic and policy

179. Under a personality theory, it would be so were it minimally subjective; under a labor-investment approach—the one implicitly followed by Landes and Posner—it would probably be copyrightable *per se*.

180. By contrast, uncontrolled exploitation of an abridgement of a novel might well interfere with the sales of the complete original text.

181. See *supra* notes 42 & 168 and accompanying text.

182. Cf. Frase, *supra* note 175, at 437 (burden of proof should be on copyright detractors to show that without copyright books would continue to be produced at present prolific rate). Compare Breyer, *supra* note 164 (contending that abolition of copyright laws is likely to benefit society while conceding that available information is insufficient to justify *immediate* abolition) with Tyerman, *The Economic Rationale for*

arguments can be made for protecting low authorship informational works against appropriation and remanipulation of nonsubjective but commercially valuable content. But even if a broad scope of protection for low authorship informational works furthers the core copyright principle of providing meaningful incentives to production, it may violate another key copyright concern: protection of the facts themselves appears to contravene the fact-expression distinction, and would thus offend another well-entrenched copyright principle.¹⁸³

2. *The Fallacy of the Fact-Expression Distinction.* — Protection of the facts themselves would perturb copyright principles, were the fact-expression distinction in fact a core copyright precept. On closer examination, and despite some judicial and professorial declarations to the contrary,¹⁸⁴ it is not clear that the *fact-expression* distinction performs or merits the same role in copyright law as does the related *idea-expression* distinction.¹⁸⁵ The latter doctrine reserves to the public domain processes and ideas contained within a copyrighted work in order to permit second comers to build on and profit by the innovations of their predecessors. Protection of processes might constrict competitive inventive activity by, for example, effectively converting the copyright on a book of accounting forms into a cheaply-obtained patent on the process of double-entry bookkeeping.¹⁸⁶ Protection of ideas could deplete the universe of themes and subjects about which to write, compose, or design.¹⁸⁷

Copyright Protection for Published Books: A Reply to Professor Breyer, 18 UCLA L. Rev. 1100, 1125 (1971) (existing copyright protection "should be continued in substantially its present form").

183. See *supra* notes 143–144 and accompanying text; see, e.g., *Miller v. Universal City Studios, Inc.*, 650 F.2d 1365, 1371–72 (5th Cir. 1981); *Rosemont Enters. v. Random House, Inc.*, 366 F.2d 303, 309–10 (2d Cir. 1966), cert. denied, 385 U.S. 1009 (1967); *Chicago Record-Herald Co. v. Tribune Ass'n*, 275 F.2d 797, 798–99 (7th Cir. 1921) (all stating that copyright extends only to the "expression" of the facts and not the facts themselves).

184. See, e.g., *Hoehling v. Universal City Studios, Inc.*, 618 F.2d 972 (2d Cir. 1980), cert. denied, 449 U.S. 841 (1980); Francione, *supra* note 10, at 566.

185. See *supra* text accompanying note 143. One might also observe that some commentators complain that the idea-expression dichotomy itself may often be disregarded, for example, with respect to the scope of protection for a play's plot and characters, see B. Kaplan, *supra* note 45, at 48–53 (criticizing *Sheldon v. Metro-Goldwyn Pictures Corp.*, 81 F.2d 49 (2d Cir. 1936)), or the extent of exclusive rights in a computer program's structure sequence and organization, see, e.g., Menell, *An Analysis of the Scope of Copyright Protection for Application Programs*, 41 Stan. L. Rev. 1045, 1084–85 (1989) (criticizing *Whelan Assocs. v. Jaslow Dental Laboratory, Inc.*, 797 F.2d 1222 (3d Cir. 1986), cert. denied, 479 U.S. 1031 (1987)); cf. Samuelson, *supra* note 82, 749–53 (contending that copyright's idea-expression dichotomy—if properly applied—so restricts scope of protection of computer programs as to deny effective coverage, and recommending *sui generis* legislation to afford some measure of idea protection to computer programs).

186. See *Baker v. Selden*, 101 U.S. 99 (1879).

187. For discussion of the public domain policies underlying the idea-expression distinction, see, e.g., Litman, *The Public Domain*, 39 Emory L.J. 965 (forthcoming

Whether the fact-expression distinction services the public domain in a manner consistent with the copyright goals of encouraging and enabling both first and second authors to create and disseminate useful works may depend both on how the first author presents the facts and on how the second author uses them. Professor Jessica Litman has offered a provocative rationale for disparate treatment of facts in works of high and low authorship. She argues that facts contained in works of high authorship are part of the public domain because facts learned from consulting these works tend to become inseparable from the second author's general world view. As a result, facts from these works inevitably "seep" into, and become necessary building blocks of, the second comer's subsequent creations. Protection of facts in works of low authorship, by contrast, does not offend public domain policy:

[I]t would be unlikely for an author to make inadvertent use of directory listings because we do not normally learn the contents of directories. . . . [Protection of] the facts in plaintiffs' directories . . . did not prohibit defendants from consulting the same preexisting sources that plaintiffs had consulted. As a result, plaintiff's copyright did not remove facts from the public domain; it simply prohibited a single, albeit more efficient, route to unearthing them.¹⁸⁸

As we have seen, precluding second comers from the shortest, cheapest route to acquiring information is, or has been, a familiar copyright precept.¹⁸⁹ This disregard of the fact-expression distinction may suggest that the prohibition on protection of facts is not perceived as being as necessary to the creation of subsequent works as is the direction against the ownership of ideas. The rhetoric of the courts in idea-expression and fact-expression cases supports this observation. In "idea" cases, the debate concerns the proper level of generality or specificity at which to draw the idea-expression line: the courts do not purport to abolish the line altogether and substitute an economic value criterion for the concept of "expression"; rather, they characterize as "expression" material that others might have been classified as "ideas."¹⁹⁰ By contrast, in "fact" cases, at least some courts appear prepared to eschew any pretense of protecting the "expression." Rather than relabelling the facts as "expression" in order to avoid conflict with the fact-expression distinction, these courts acknowledge that the distinction itself is too constricting.¹⁹¹

1990); Brown, *supra* note 23, at 601-05; Nimmer, A Comment on the Douglas Dissent in *Lee v. Runge*, 19 Bull. Copyright Soc'y 68 (1971).

188. Litman, *supra* note 187, at 1016.

189. See *supra* text accompanying notes 46-52, 92-98.

190. See, e.g., *Whelan Assocs. v. Jaslow Dental Laboratory, Inc.*, 797 F.2d 1222 (3d Cir. 1986) (generously defining "idea" of computer program's structure, sequence and organization as its "function"), cert. denied, 479 U.S. 1031 (1987); Menell, *supra* note 185, at 1074.

191. See, e.g., *Rand McNally & Co. v. Fleet Management Sys., Inc.*, 591 F. Supp.

There are additional reasons to sequester the fact-expression distinction to works of high authorship. The fact-expression distinction may make sense when the facts at issue are one component of a complex, personality-rich work, such as a narrative history.¹⁹² In these instances, limiting copyright's reach to the first author's subjective contributions to the facts not only frees second authors from having to account for all the sources, but it also leaves the first author with extensive protectable material. If incentives thereby afforded high authorship informational works for fact-gathering seem weak, copyright coverage of the personal contributions nonetheless should stimulate fact-interpretation through authorial selection, arrangement, description, and evaluation of the facts.¹⁹³

By contrast, low authorship works offer little to protect beyond the information. Thus, when both the first and second works are low authorship products, the second comer's free reuse of the first compilation may not advance the public access policies underlying the fact-expression distinction, but may simply discourage production of these kinds of works. If the second work directly competes, the public makes no gain in knowledge, while the incentives to the first compiler would be compromised. If the second work exploits a different market for which the first compiler might have repackaged his information, there may be a net gain in knowledge, but—as the discussion of derivative works has shown—the incentives to the initial creation and distribution of data bases and similar fact-intensive works of low authorship may still be weakened.¹⁹⁴ With respect to low authorship works, the fact-expression distinction thus is inherently flawed: its grudging measure of protectability undermines its own goals by diminishing incentives to produce informational works.

726, 731 (N.D. Ill. 1983), modified, 600 F. Supp. 933 (N.D. Ill. 1984); *National Business Lists, Inc. v. Dun & Bradstreet, Inc.*, 552 F. Supp. 89, 92 (N.D. Ill. 1982); see also *Illinois Bell Tel. Co. v. Haines & Co.*, 905 F.2d 1081, 1086 (7th Cir. 1990) (when direct copying of telephone listings is established, no need to prove substantial similarity of *expression*); cf. *Miller v. Universal City Studios, Inc.*, 650 F.2d 1365, 1370 (5th Cir. 1981) (indicating that, by historical accident, directory cases lead a life free from constraints of fact-expression distinction). But see *West Publishing Co. v. Mead Data Cent., Inc.*, 799 F.2d 1219, 1223 (8th Cir. 1986), cert. denied, 479 U.S. 1070 (1987) (protecting economic value of internal citations to West System reporters, but striving—unconvincingly—to characterize its result as protection of reporters' "arrangement").

192. Arguably, in such a case the distinction might not be necessary: the appropriation of facts may be *de minimis*, or it might be excused under the fair use doctrine. On the other hand, one might suggest that "fact-expression," "de minimis," and "fair use" are all exculpatory devices performing the same role at different stages of a litigation.

193. Although some courts would also extract fact interpretations from copyright coverage, see, e.g., *Hoehling v. Universal City Studios, Inc.*, 618 F.2d 972, 979 (2d Cir.), cert. denied, 449 U.S. 841 (1980), I believe those holdings misconceive the "high" nature of "authorship" of fact-interpretive works. See Ginsburg, *supra* note 140; see also *Nash v. CBS*, 899 F.2d 1537, 1541 (7th Cir. 1990) (affirmance of later stage of *Nash* litigation) (offering economic critique of *Hoehling* and similar decisions).

194. See *supra* notes 173–183 and accompanying text.

Reliance on incentives, however, can prove too much. If the fact-expression distinction disserves the public domain through excessive enthusiasm to cast works (or their components) into it, the incentive rationale may give too short shrift to arguments for public access to low authorship works during the copyright term. Maximum incentives might be afforded to data collection were the first gatherer of a dataset to receive exclusive control over any recombinations that might be made of information contained within the compilation; nonetheless, vesting this control in a single compiler would cut off public access to new informational works that could be generated from the data, but that the compiler declines to license. It is not a sufficient answer to reply that, once the copyright expires, anyone may freely revise the data; seventy-five years is a long time to suspend the public interest in new combinations of gathered information.¹⁹⁵

The problem, then, concerns the appropriate balancing between securing the commercial value of low authorship compilations on the one hand and promoting creation of and access to a wide variety of informational works on the other. This balancing is, of course, what copyright law is primarily engaged in.¹⁹⁶ That the subject matter concerns low authorship, personality-deprived works does not change the basic enterprise. In Part III, after an examination of various alternatives, I offer a specific proposal for adapting United States copyright law to strike a better balance regarding low authorship informational works. The proposal would modify the federal copyright law to recognize the first compiler's rights over derivative versions of informational works, but would qualify those rights by compelling information providers to license rights to produce derivative compilations.

III. A COPYRIGHT LAW FOR LOW AUTHORSHIP WORKS

I have contended that modern copyright doctrine respecting informational works has suffered from imposition of a unitary, personality-based conception of authorship. Nonetheless, our present copyright

195. The copyright term in a compilation (as a work made for hire) is 75 years. 17 U.S.C. § 302(c) (1988). Moreover, the actual term of protection may be indefinite, for each new increment of information in new editions of the compilation would be entitled to its own term of protection. See *id.* § 103(b); see also discussion, *infra* note 232, concerning appropriate term of protection for information subject to compulsory license.

196. See, e.g., *Sony Corp. of Am. v. Universal City Studios, Inc.*, 464 U.S. 417, 429 (1984) (task of defining copyright scope "involves a difficult balance between the interests of authors . . . in the control and exploitation of their writings . . . on the one hand, and society's competing interest in the free flow of ideas, information, and commerce on the other . . ."). See generally 1 P. Goldstein, *supra* note 17, at 4-11:

The Copyright Act seeks to achieve [its] object through a regime of carefully balanced property rights that give authors and their publishers sufficient inducement to produce and disseminate original literary . . . works and, at the same time, allows others to draw on these works in their own creative and educational endeavors.

statute is not monolithic; it installs several disparate regimes of protection, all under the general heading "copyright." These disparities range from the total exclusion of certain rights of exploitation¹⁹⁷ to the truncation of others through the imposition of compulsory licenses¹⁹⁸ or special exemptions.¹⁹⁹ Moreover, most of these disparities are the result of specially tailored responses to problems provoked by new media of dissemination.²⁰⁰

But these statutory adaptations represent *restrictions* on copyright scope. My inquiry concerns the possibility of a special *expansion* of copyright subject matter and scope. Does copyright show a similar propensity to amend its rules to accord more, rather than less, protection? Historically, copyright has responded to successive new technologies by broadening its contours. Copyright has accommodated print media, photographs, motion pictures, sound recordings, and computer programs. The scope of protection has grown from mere reproduction to encompass public performance and derivative works rights as well.²⁰¹

Enlarging the scope of protection of fact compilations to reach remanipulations of information into different, noncompeting works would continue two copyright traditions. First, the enlarged scope of protection derives from the recognition that a different kind of copyright pertains to low authorship works of commercial value. It therefore breaks with our modern detour into a unitary, personality-oriented scheme of copyright, to return to our prior, and longer standing, understanding of copyright as concerning both—or either—authorial presence, and labor and investment. Second, extending the derivative works right to low authorship informational works fits within the copyright tradition of expanding protection in response to changing technology. As we have seen, as the means of copying improved, the quantum of copying requisite to establishing an infringement of an informational work diminished.²⁰² By the end of the nineteenth century,

197. See 17 U.S.C. § 114 (no public performance right in sound recordings).

198. See *Id.* § 111(d) (compulsory license for cable retransmissions); *id.* § 115 (compulsory license for mechanical recordings); *id.* § 116A (compulsory license for jukebox performances of nondramatic musical compositions); *id.* § 118 (compulsory license for certain public broadcasting performances), *id.* § 119 (compulsory license for receipt of broadcast signals by home satellite dishes). See generally Cassler, Copyright Compulsory Licenses—Are They Coming or Going?, 37 J. Copyright Soc'y 231 (1990) (illuminating legal, philosophical, economic, and political factors that dictate policy decisions of Congress in creating and eliminating compulsory licenses).

199. See 17 U.S.C. § 108 (library and archival reproduction); *id.* § 110 (certain public performances and displays).

200. See *supra* note 198.

201. See *supra* notes 68–69 and accompanying text. Compare Act of May 31, 1790, ch. 15, 1 Stat. 124 reprinted in Copyright Enactments of the United States 1783–1906, *supra* note 29, at 32 (embodying a relatively narrow scope of protection) with 17 U.S.C. §§ 101–810 (1976 Copyright Act, as amended through 1988) (comprising a much broader scope of protection).

202. See *supra* notes 92–98 and accompanying text.

given the vast improvements in printing technology,²⁰³ retaining the "new toil" rule exculpating defendants who invested additional efforts in their copying would have deprived information gatherers of meaningful protection. Today, with computer technology, retaining the high authorship rule limiting the scope of infringement to copying the "selection and arrangement" or "form" of a fact compilation would similarly compromise the copyright in those works.

Although I ultimately argue that the present copyright law should be amended to extend protection—subject to a compulsory license²⁰⁴—against derivative versions of fact compilations, there exist at least two alternative proposals for reform. One possibility would be to forgo copyright relief altogether, and to rely on contract and self-help. Another would be to impose full copyright liability, without the qualification of a compulsory license. As the ensuing discussion shows, the first alternative is unlikely to secure effective protection; the absence of copyright protection would therefore threaten to diminish incentives to information gathering. By contrast, the second alternative may afford ample incentives to production, but too few to dissemination. A derivative rights regime qualified by compelled collective licensing may preserve incentives to information collection, while simultaneously maintaining maximum access and opportunities to make new combinations of the data.

A. Alternative 1: No Copyright Liability

In the absence of any copyright protection, the producer of an informational work may endeavor to prevent various forms of copying by constraining users to a protective contract. As a practical matter, the contract device will work only so long as the information provider can keep track of her co-contractant's actions. If the provider furnishes information by means of an on-line service, she can, at least in part, engage in the necessary tracking of her clients' copying, and can charge accordingly. For example, the service might set fees based on a combination of time and "hits"—that is, increments of information downloaded or printed out.²⁰⁵ The information provider may not, however, be able to distinguish between subscribers accessing the data for personal use and subscribers intending to repackage and resell the data. The service therefore may have to choose between setting a high price to cover uncompensated resales of information (but also discouraging subscriptions from private users), or setting a price attractive to

203. See *supra* notes 94–96 and accompanying text.

204. Strictly speaking, protection would be qualified by a hybrid of a compulsory license and voluntary collective licensing. I shall occasionally refer to this regime as "compelled collective licensing." See *infra* notes 222–252 and accompanying text.

205. See, e.g., Dialog Information Services, Inc., Price List (July 1989) (multi-database on-line information service) (on file with Columbia Law Review).

general users (but incurring the risk of uncompensated resale).²⁰⁶ On the assumption that resellers of information are likely to copy larger increments of data, a middle course might be to increase the fees geometrically with the number of "hits."

If the information comes in a free-standing format, such as conventional print materials, or newer media, such as CD ROM,²⁰⁷ securing payment for copying becomes more difficult. The combination of print materials and photocopiers is virtually immune to surveillance. Few, if any, furnishers of photocopiers, be they libraries, offices, or commercial photocopy establishments, keep records of what has been copied, nor do individuals (or even corporate users) generally contact individual publishers seeking permission to photocopy informational works.

While individual information proprietors may lack the ability to supervise or control large-scale, widely diffused copying, collective administration of rights yields some benefits to producers of informational works.²⁰⁸ The right licensed, however, is the right under copyright to authorize reproduction, not the derivative works right, much less any claim to disembodied information.²⁰⁹ Moreover, as a

206. See S. Besen, *New Technologies and Intellectual Property: An Economic Analysis* 30-31 (Rand N-2601-NSF, 1987). On the technology of, and the copyright and economic problems caused by, downloading, see Gray, *Databases, Downloading and Proprietary Rights*, 19 Program 311 (1985).

207. A CD ROM looks like a compact disk, and stores 4,000 to 5,000 pages of digitally encoded literary works.

208. See, e.g., S. Besen & S. Nataraj Kirby, *Compensating Creators of Intellectual Property: Collectives that Collect* 45-63 (Rand R-3751-MF, 1989) (discussing organizations licensing photocopy reproduction rights in United States and abroad); Liebowitz, *Copying and Indirect Appropriability: Photocopying of Journals*, 93 J. Pol. Econ. 945, 954-56 (1985).

209. Two examples of collective licensing in related fields are worth mentioning. The Copyright Clearance Center (CCC), a consortium of publishers of scientific and technical books and journals, endeavors to provide compensation for photocopying. The CCC engages in collective licensing of nonexclusive reproduction rights to users (primarily for-profit corporations engaging in considerable photocopying for research and development) covering all works registered with the CCC by its member publishers. The CCC calculates each user's license fee by applying the publisher's royalty rates for each title to statistical surveys of users' copying activities. See Copyright for the Nineties, *supra* note 141, at 465-66; S. Besen & S. Nataraj Kirby, *supra* note 208, at 46-53.

The digital technology counterpart to the CCC is an experimental program conducted by University Microfilms, called BART (Billing And Royalty Tracking). This program covers CD ROM storage media for informational works. Each page of material entered on the BART program's CD ROMs is encoded so that a record may be made each time a page is accessed and printed out. Access to printers is made available by means of a debit card that end-users may buy from libraries participating in the program. The lump sum purchase price of the card covers the making of a certain number of copies. (Many libraries already have such cards for use with photocopiers.) Each time the card is inserted in a computer printer and a copy is made from the CD ROM, the corresponding number of units is deducted from the available total on the card. The computer, in the meantime, is keeping a record of which pages are printed out, so that precise compensation subsequently may be afforded the proprietors of the encoded material. See Copyright for the Nineties, *supra* note 141, at 467.

means of information protection, collective administration must confront the same problem facing on-line services: the fees may provide remuneration for initial copying, but may not account adequately for the copier's activities once the copy is established. Whether the source of the information is on-line, photocopy, or CD ROM, once the information is acquired, the provider has no readily verifiable means of control over the acquiror.²¹⁰

The information provider might endeavor to secure postdelivery control by obtaining the acquiror's agreement not to reuse information without the provider's permission, or, at least, without paying a royalty. The validity of the agreement may depend on the context of contracting. A "shrink wrap license" equivalent for a CD ROM may not, absent a validating state statute, constitute an enforceable contract.²¹¹ In the on-line context, such an agreement looks more like an arms-length transaction.²¹² Nonetheless, assuming that ensuing reuse could be proved, the contract would reach the contracting user, but would not affect third parties who appropriate or reuse the information.

Without copyright protection, the information provider may be able to reach some third parties who acquire unauthorized access to data, for example by "hacking" into an on-line data base. This kind of activity may give rise to a state law claim sounding in contract, or property, or some ill-articulated combination of the two. For example, some

210. Information collectives may endeavor to price discriminate between users more likely to reshuffle and resell data, and those using data solely for internal purposes. Cf. Korman & Koenigsberg, *Performing Rights in Music and Performing Rights Societies*, 33 J. Copyright Soc'y 332, 358-59 (1986) (describing different blanket license fee rates of the American Society of Composers, Authors, and Publishers (ASCAP) based on characteristics of the user; although a neighborhood bar will be given access to the entire ASCAP repertory, as will a television network, the bar pays a fee based on objective factors such as seating capacity while the network pays a fee based upon a percentage of net revenues).

211. A "shrink wrap license" is an adhesion contract directed at consumers of computer software: its terms appear on the packaging of the software product and purport to secure the buyer's agreement, upon opening the package, to the terms and conditions set forth. See Maher, *The Shrink-Wrap License: Old Problems in a New Wrapper*, 34 J. Copyright Soc'y 292 (1987).

The "shrink wrap license" has not fared well in the courts, albeit for reasons other than their adhesion contract quality. See *Vault Corp. v. Quaid Software Ltd.*, 847 F.2d 255, 268-70 (5th Cir. 1988) (holding "shrink wrap license" agreement barring computer program purchasers from copying or modifying program federally preempted under § 117 of Copyright Act).

212. This kind of agreement, unlike shrink wrap "licenses," would probably not be held preempted by the copyright law. Parties are free to agree to forbear from copying material that the copyright law designates as public domain. See, e.g., *Acorn Structures, Inc. v. Swantz*, 846 F.2d 923, 925-26 (4th Cir. 1988) (reversing holding of preemption of breach of contract claim in which district court ruled that contract action for use of idea would conflict with copyright law's proscription of idea protection). But see Kitch, *The Law and Economics of Rights in Valuable Information*, 9 J. Legal Stud. 683, 707 (1980) ("The contractual transmission of information whose value is not effectively shielded by a property right is very difficult.").

state courts have found violations of property interests when spectators at sporting events violated the contractual conditions of access, or obtained illicit access, to the sports arena or event and then photographed or broadcast the events.²¹³

In addition, some self-help measures are worth considering. These include encryption and updating of information. Technological "fixes" such as imposing anticopy codes on diskettes and CD ROMs may have some appeal, but often prove too user-"unfriendly" to make the product attractive to general consumers.²¹⁴ Moreover, anticopying solutions may be inappropriate: the data base may be intended for copying—by private users; the problem, however, is resale. For certain kinds of data bases, a different tactic—updating—may afford a means of deterring resale of copied information. The commercial value of some information, such as stock price quotations, may be so immediate and fleeting that there is no market for reselling "old" information.²¹⁵ For more static kinds of information, however, unavailability of updates may not deter the information reseller.

Remitting information gatherers to contract and self-help measures, therefore, may not afford effective protection. But the problems with these measures are not limited to their dubious efficacy. Privatizing information through contract, encryption, and similar devices may carry greater individual and social costs than would a copyright system. In the former instance, the information provider incurs substantial additional expense in devising extra-copyright means to protect the information. These costs affect the availability of information to consumers

213. See, e.g., *Rudolph Mayer Pictures, Inc. v. Pathe News, Inc.*, 235 A.D. 774, 255 N.Y.S. 1016 (App. Div. 1932) (photographs of boxing match in Ebbets Field taken from roof of adjoining building), discussed in *Madison Square Garden Corp. v. Universal Pictures Co.*, 255 A.D. 459, 465, 7 N.Y.S.2d 845, 851 (App. Div. 1938); *Twentieth Century Sporting Club, Inc. v. Transradio Press Serv., Inc.*, 165 Misc. 71, 73, 300 N.Y.S. 159, 161 (Sup. Ct. 1937) (violation of ticket's prohibition of broadcast of boxing match); cf. *Madison Square Garden*, 255 A.D. at 464–66, 7 N.Y.S.2d at 850–52 (photographs taken to simulate Madison Square Garden violated property right in sports arena's "reputation"); *Pittsburgh Athletic Co. v. KQV Broadcasting Co.*, 24 F. Supp. 490, 492 (W.D. Pa. 1938) (defendant's observers stationed where they could see over field enclosure in order to report play by play of baseball games in plaintiff's ball park held to violate plaintiff's property right).

A claim of illicit access to information might well survive copyright preemption. Although the claim involves the copyrightable subject matter of a data base and seeks to redress the act of reproduction (an act within the exclusive scope of copyright), the illicit access element of the claim arguably falls outside copyright concerns. For elaboration of an "elements of the claim" approach to copyright preemption, see, e.g., *Nimmer on Copyright*, supra note 5, § 1.01[B]; *Gorman*, supra note 141, at 608–10.

214. Moreover, anticopying codes tend to spark production of software designed to nullify the copy protection. See, e.g., *Vault Corp. v. Quaid Software Ltd.*, 847 F.2d at 256–58.

215. Cf. *Kitch*, supra note 212, at 713 (arguing that property right in certain kinds of trade secret information may not be necessary because information has "high depreciation rate").

in several ways. The provider expends effort and expense in protecting information when she might otherwise have invested that effort in gathering more of it; absence of copyright therefore may compromise the collection of information. By the same token, if the protection costs are great enough, they may deter the information-gatherer from the enterprise altogether. Finally, if the costs do not eliminate information-gathering incentives, the provider will seek to pass them along to the consumer; as an ironic result, consumer access to information may be more expensive without copyright than with it.

B. Alternative 2: Full Copyright Liability

Although absence of copyright liability for remanipulation of information threatens to discourage the collection of facts, full protection may not in fact afford maximum incentives to production; instead, as Landes and Posner have argued with respect to copyright law generally, "beyond some level copyright protection may actually be counterproductive by raising the cost of expression," and thereby cutting off the production of new and different works.²¹⁶

Full copyright protection for compiled facts, such as permitting the first compiler to enjoin any form of copying or revision of the work, might prove counterproductive to the creation of data bases and similar collections of information. Arguably, data compilers who know that they will be able to protect their data not only against competing copying, but against recompilation into works directed at other markets, will receive ample incentive to gather information. Subsequent compilers too can start from scratch, by going to the original sources, and then receiving a full copyright on their collections. Going to the original sources, however, can be very expensive; second comers might be discouraged from incurring these costs. On the other hand, it does not necessarily follow that variant data bases will not be produced. Those second comers unwilling to start from scratch can still negotiate with the first compiler for a license to copy and rearrange data.

The problems with a full liability regime stem from concerns with the way the first compiler might manage the licensing process. For example, the first compiler may charge a prohibitively high price for recombining data. Of course, this price cannot equal or exceed the cost of starting from scratch, or no second comer would find the license appealing. It is therefore not clear what "too high" a price might be. Price aside, there are other problems with vesting in the initial compiler full control over recombining gathered data. First, the compiler is not obliged to license anyone to revise the data. Such a refusal may initially seem irrational, but it is foreseeable. For example, the compiler may

216. Landes & Posner, *supra* note 165, at 332. For Landes and Posner, the idea-expression distinction sets an appropriate level of protection; they treat the fact-expression distinction rather summarily. *Id.* at 347-53.

decline to license certain data for derivative use now because she has eventual plans to engage in these remanipulations herself. Second, the compiler may be willing to license, but the *licensee* (seeking to maximize the value of his derivative compilation) may demand an *exclusive* license to use particular data. Blockage of other compilers would still occur. Third, the cost of negotiating with the first compiler may be high; indeed, transactions costs accumulate if the would-be licensee seeks facts from several data bases, all separately owned.

Some of these problems might be solved by collective administration and licensing of the derivative works right. Just as collective licensing has assisted both copyright owners and users in the context of music performance rights, and—to a lesser extent—photocopying,²¹⁷ collective licensing of the derivative works right in data bases might address both the problems of transactions costs, and of greedy licensees. Collective licensing diminishes transactions costs by enabling users to contract with a single entity, which can grant rights for all its members.²¹⁸ Collective licensing would also ensure that all would-be licensees have equal access to the data, provided the collective makes its entire repertory available and grants only nonexclusive rights.²¹⁹ Finally, collective licensing can both diminish transactions costs and facilitate access to the licensed material by charging fees keyed to the capacities of the user, rather than to the nature and quantity of what is copied.²²⁰

But voluntary collective licensing will alleviate the problems only if enough information providers are willing to join and to grant nonexclusive rights on a blanket basis. It is not clear that enough information providers share the same interests. For example, in the somewhat analogous domain of photocopying of scientific and technical books and journals, the voluntary collective licensing society established to administer photocopy rights had in its early years encountered difficulty in obtaining the membership of many publishers of these refer-

217. See generally S. Besen & S. Nataraj Kirby, *supra* note 208 (profiling collective organizations worldwide); Korman & Koenigsberg, *supra* note 210, at 332 (reviewing "development of the performing right in music" and operation of ASCAP); Kernochan, *Music Performing Rights Organizations in the United States of America: Special Characteristics; Restraints; and Public Attitudes*, 21 Copyright 389 (1985) (public misunderstanding of performance rights hobbles unique U.S. system of private, collective enforcement).

218. See sources cited *supra* note 217.

219. For example, the music performance rights societies ASCAP and Broadcast Music Inc. (BMI) grant nonexclusive blanket licenses in their repertories; as a result, all users, from radio and television stations to local bars and discotheques, can perform the same music. See Korman & Koenigsberg, *supra* note 210, at 348.

220. In collective administration of music performance rights, ASCAP and BMI, and, in collective administration of photocopy rights, the Copyright Clearance Center (CCC), offer blanket licenses granting rights in the entire repertory, with the price of the license depending on the characteristics of the user. See S. Besen & S. Nataraj Kirby, *supra* note 208, at 19–20, 48–53.

ence works.²²¹ To the extent that some find it feasible and prefer either to license on their own, to grant exclusive licenses, or not to license others at all, access to information may still be curtailed.

C. Alternative 3: Compelled Collective Licensing of Derivative Information Compilations

Compulsory licensing is not a favored technique in copyright law. It is a form of price regulation, and price regulation is generally considered administratively cumbersome, unlikely to arrive at a "correct" rate, and contrary to copyright's overall free market philosophy.²²² On the other hand, as the preceding discussion has shown, the alternatives may be undesirable as well.²²³ Given a choice between no protection,

221. Interview with Joseph Alen, Esq., Vice President of the Copyright Clearance Center (Oct. 11, 1990); see also S. Besen & S. Nataraj Kirby, *supra* note 208, at 47 (in 1983, Copyright Clearance Center's repertory included 7,200 titles; in 1989, 1,000,000 titles); cf. Karnell, *Extended Collective License Clauses and Agreements in Nordic Copyright Law*, 10 *Colum.-VLA J.L. & Arts* 73, 74-75 (1985) (Nordic solution to holdout problem is mandatorily to include all relevant copyright owners as parties to collective photocopying license, once certain percentage of rights holders have willingly signed on).

Moreover, forming the collective involves its own costs in time, money, and effort; it may be years before these costs are recovered and the collective becomes profitable. For example, the Copyright Clearance Center was formed in 1978; it began distributing revenues to members a decade later. See S. Besen & S. Nataraj Kirby, *supra* note 208, at 46 & n.3.

222. See sources cited *supra* note 27. But see Ringer, *Copyright in the 1980s*, 23 *Bull. Copyright Soc'y* 299, 305 (1976) (suggesting that compulsory licensing may offer only response to looming problems of new technology).

223. The Nordic countries have appended "catalogue protection" provisions to their copyright statutes. These cover fact compilations, such as directories and catalogues, that lack subjective selection and arrangement of material, and therefore fail to meet local, personality-based, standards of originality. See Denmark, Copyright Law, § 49; Finland, Copyright Law, art. 49; Iceland, Copyright Law, art. 50; Norway, Copyright Law, § 43; Sweden, Copyright Law, § 49 (all reprinted in *Copyright Laws and Treaties of the World* (compiled by the United Nations Educational, Scientific and Cultural Organization and the World Intellectual Property Organization 1990) [hereinafter *Copyright Laws and Treaties of the World*]). See generally Karnell, *The Scandinavian Catalogue Rule*, in *Copyright in Information* (P. Hugenholtz ed. forthcoming 1990) ("catalogue rule" of Nordic countries allows for protection of some factual compilations for a ten-year period).

Might the Nordic example serve as a model for United States legislators? The short answer is: probably not, because the catalogue provisions, while more expansive than the personality model of copyright with respect to subject matter, are no more (and perhaps even less) extensive regarding the scope of protection. Thus, these statutes protect against copying, but not against remanipulation of information within a catalogue. This limited scope of protection has drawn recent criticism. The Copyright Committee, appointed by the Finnish State Council, has issued a report covering, *inter alia*, protection for data bases. This report concludes, "The scope of the protection seems partly insufficient." Finnish Copyright Committee, *Information Technology and Copyright: Sub-Report IV, English Summary* 13 (1987) (on file with Columbia Law Review).

The Nordic statutes were enacted in the late 1950s and early 1960s; their inade-

full protection, and some middle ground, some form of compulsory licensing begins to seem less obnoxious. The effect of a compulsory license is to grant open access to the covered material, subject to an obligation to pay the owner for the use. Compulsory licensing substitutes compensation for control over the copyrighted work.

1. *Justifications for Compulsory Licensing.* — The policy underlying the license proposed here differs somewhat from the conventional, stated rationale for compulsory licensing. The most popular current justification for compulsory licensing is the reduction of otherwise insuperable transactions costs.²²⁴ Although this rationale is not always persuasive, because in many cases transactions costs may be subdued by voluntary collective licensing,²²⁵ it may be more justified in the case of low authorship informational works, for information providers may not share a sufficient community of interests to form voluntary licensing collectives encompassing all publicly disclosed data bases, directories, and similar works.

Nonetheless, a transactions costs analysis does not fully explain the basis for a compulsory license in this and, perhaps, other contexts. The premise of the transactions costs analysis is that, but for these costs, the market would work and the parties would bargain, with the license simply setting the rate that would otherwise have been achieved. But, assuming these costs do not exist (or do not supply a deterrent), it does

quate coverage of data bases likely stems from the kind of subject matter then envisioned. At the time, the perceived subject matter of the catalogue statutes was hardcopy documents, such as timetables and telephone directories, of predominantly local interest. See legislative documents cited in T. Stensaasen, *Opphavsrettslovens* § 43 ("Katalogregelen") 130–31 (Oslo 1985). Cases applying the catalogue statutes have included disputes over a bibliography, local telephone books, and a schedule of SAS flights to Copenhagen. See *id.* at 132. Electronic data bases, permitting easy access to myriad data for copying or remanipulation, do not appear to have been anticipated. The catalogue statutes' limited scope of protection may well have satisfied compilers' concerns in 1960; in 1990, modern information production and piracy problems may render the statutes largely ineffective.

International discussions concerning appropriate protection for data bases and similar works appear to address mainly the subject matter, rather than the scope, of protection. See WIPO Meetings: The Printed Word Preparatory Document for and Report of the WIPO/UNESCO Committee of Governmental Experts, 24 Copyright 42, 81–82 (1988). Discussion has focused on inclusion of unoriginal compilations within the subject matter of *sui generis* protection. Admittedly, such a step is better than nothing, particularly in nations holding to a higher standard of personal originality than the United States. Nonetheless, I believe an at least equally significant problem concerning compilation/data base protection is the scope of acts deemed infringing. If the United States is to protect data bases and similar low authorship works of information against derivative versions, it must do so without substantial assistance from foreign models.

224. See, e.g., H.R. Rep. No. 1476, *supra* note 113, at 89 (justifying cable compulsory license on ground that "it would be impractical and unduly burdensome to require every cable system to negotiate with every copyright owner whose work was retransmitted by a cable system"); Goldstein, *supra* note 27, at 1137–38.

225. See *supra* notes 217–220 and accompanying text; see also Goldstein, *supra* note 27, at 1138–39.

not necessarily follow that a copyright owner would *wish* to license her work to all who sought a license. The normal copyright "market" comprises the right to exclude others from exploiting the work.

The effect, and, I would argue, the real purpose of a compulsory license is to reduce the extent to which copyright ownership of the covered work conveys monopoly power, so that the copyright owner must make the work available to all who wish to access and exploit it.²²⁶ Imposition of a compulsory license reflects a legislative judgment that certain classes or exploitations of works should be more available to third parties (particularly "infant industries") than others.²²⁷ Compulsory licensing does not always mean, however, that the copyright owner is less well off than before. Sometimes a compulsory license supplies compensation when, under prior law or practice, no protection existed at all.²²⁸

In the case of low authorship informational works, the compulsory license would supply protection for information when, under the uni-

226. Another purpose is to set the right price when we fear the negotiated price may be too high. This rationale probably best explains 17 U.S.C. § 115, the mechanical recordings license. Similarly, 17 U.S.C. § 118, the public broadcasting license, might best be understood as a subsidy to public broadcasting: public broadcasters in effect are enabled to pay less than the market rate.

Arguably, the fair use doctrine, 17 U.S.C. § 107, might afford adequate third party access to informational works without imposition of a compulsory license. The fair use route, however, poses several disadvantages. Fair use does not assist parties, or industries, in making *ex ante* determinations whether or not to copy, and if so, how much. It is a highly fact-specific defense usually deemed inappropriate for resolution at the summary judgment stage. See, e.g., *DC Comics v. Reel Fantasy, Inc.*, 696 F.2d 24, 28 (2d Cir. 1982). As a result, it is also very costly. Moreover, fair use may not even apply to the kind of commercial appropriations envisioned here. See *supra* note 139; see also Fisher, *Reconstructing the Fair Use Doctrine*, 101 Harv. L. Rev. 1661, 1723-27 (1988) (suggesting that fair use doctrine would be improved by congressional amendment to entitle certain uses, such as educational photocopying, to compulsory licenses).

227. See, e.g., Cassler, *supra* note 198, at 246-47 (discussing examples of compulsory licensing to benefit "emerging industry").

228. For example, the compulsory license for cable retransmission of television programs followed questionable Supreme Court decisions that had held that the retransmissions did not constitute a "performance" within the meaning of the 1909 Copyright Act. See *Teleprompter Corp. v. CBS*, 415 U.S. 394, 406-15 (1974); *Fortnightly Corp. v. United Artists Television*, 392 U.S. 390, 395-402 (1968). The 1976 Act's compulsory license thus afforded some protection in lieu of none. Of course, Congress could simply have "overruled" the Supreme Court. (Since the 1976 Act definition of "perform" covers cable retransmissions, Congress has partially overruled *Fortnightly* and *Teleprompter*. See 17 U.S.C. § 101.) But Congress, like the Court, may have been concerned that, were there full copyright liability, the networks would refuse to supply programming to cable systems, their potential rivals. See, e.g., Copyright Law Revision—CATV: Hearings on S. 1006 Before the Subcomm. on Patents, Trademarks and Copyrights of the Senate Comm. on the Judiciary, 89th Cong., 2d Sess. 211, 212 (1966) (statement of Edwin M. Zimmerman, Acting Assistant Attorney General (Antitrust Division)). Arguably, the policy decision to compel the availability of network programming to cable carriers underlay both the Supreme Court's finding of no liability and Congress's substitute of qualified liability.

tary, personalist conception of originality, or under some current applications of the fact-expression dichotomy, none is now available. The license also would make the information more widely available for exploitation by others. The license therefore would correct both the underprotection of information resulting from decisions holding the compilation either unoriginal or protected only to the extent of its subjective "selection" and "arrangement," and the overprotection of information resulting from decisions according injunctive relief against remanipulation of information. Compulsory licensing is an appropriate means of reconciling the warring social goals of stimulating the production of information on the one hand, and ensuring its broadest dissemination on the other.

2. *Modifying the 1976 Act: Subject Matter to Which the License Would Apply.* — A special compulsory license regime for low authorship informational works that would afford compensation for remanipulation of data would require modifying certain provisions of the 1976 Copyright Act. First, the law would need to restore the sweat/investment concept of authorship, by stating that a compilation can be an "original work of authorship" by virtue either of its "selection" and "arrangement" or of its collection or gathering of information.²²⁹ Second, the section that sets forth the fact-expression dichotomy²³⁰ would need an amendment to specify that, subject to the compulsory licensing provisions, the scope of copyright in a compilation does extend to the information contained therein.²³¹

If the purpose of these amendments is to encourage the produc-

229. Arguably this interpretation can already be extracted from the current text of the 1976 Act's definitional section, 17 U.S.C. § 101. See Denicola, *supra* note 13, at 527-32. Contra Patry, *supra* note 9, at 11. Patry probably has the better of this argument, for if § 101 defines a compilation as "a work formed by the *collection and assembling* of . . . data," it also appends to this description the qualification "data that are *selected, coordinated or arranged*" (emphasis added). Thus, collection alone probably does not suffice; some further, arguably subjective, treatment of the data appears to be required under the current act.

230. 17 U.S.C. § 102(b); see text accompanying *supra* note 143.

231. Section 103(b) of the Copyright Act, governing copyrightable subject matter in compilations, specifies that the copyright "extends only to the material contributed by the author of such work . . . and does not imply any exclusive right in the preexisting material." If one considers facts to be "preexisting material," see, e.g., Nimmer on Copyright, *supra* note 5, § 2.11[A] (facts do not "originate with" authors), then this section would also require amendment. The characterization of facts as preexisting, however, may not be persuasive. See, e.g., Ginsburg, *supra* note 140, at 657-59; Litman, *supra* note 187, at 996-97.

Imposition of a *de facto* compulsory license on reproduction or derivative works rights in an information compilation, in lieu of an injunction or denial of any relief, is not unprecedented. In *Dun v. Lumbermen's Credit Ass'n*, 209 U.S. 20, 23-24 (1908), the Supreme Court affirmed the lower courts' limitation of plaintiff's recovery to a remedy at law when defendant had copied some listings from plaintiff's credit reports, but had also engaged in such substantial, and costly, independent information-gathering that in some respects defendant's compilation contained more information than plaintiff's.

tion of low authorship informational works by securing more of their commercial value than the unitary approach to copyright currently captures, then the modifications should benefit both low authorship works of undiscernible personality (e.g., no apparent selection or arrangement), and low authorship works that display some subjective characteristics, such as the evaluated data in a credit reference list. If the amendments covered only the lowest of low authorship compilations, they might create perverse incentives to avoid producing low authorship works of any subjective character.²³²

232. A modification to the copyright law should also address whether the informational work must have been publicly disseminated before it is eligible for protection. Arguably, if the purpose of the modification is to encourage dissemination of informational works, only disclosed works should benefit from the special protections. On further reflection, however, this limitation may not advance the goal of dissemination—at least, not if one believes that incentives to produce are a precondition of incentives to disseminate. Copyright policy in general favors public disclosure of works of authorship; nonetheless the Copyright Act not only protects unpublished works, but, according to recent caselaw, also affords these works greater security against copying than published works receive because strong prepublication protection fosters production. See Swanson, *The Role of Disclosure in Modern Copyright Law*, 70 J. Pat. & Trademark Off. Soc'y 217, 223–26 (1988). Note that if undisclosed informational works are entitled to protection, it does not necessarily follow that that protection must be qualified by a compulsory license. The statutory modifications proposed here come in two steps: first, to specify the protectability of low authorship compilations; and second, to subject certain exploitations to compulsory licensing.

Finally, one should consider whether the duration of protection for low authorship informational works should be different from that accorded other copyrighted works. The United States term of protection is the life of the author plus fifty years, or seventy-five years from publication of a work made for hire. See 17 U.S.C. § 302. Intellectual property laws addressing subject matter that at least some countries place on the fringe of copyright generally afford a protective period shorter than the usual life plus fifty years copyright term. Thus, the Nordic catalogue provisions afford a ten-year period, see *supra* note 223; the Berne Convention for the Protection of Literary and Artistic Works, Sept. 9, 1886, art. 7(4), in *Copyright Laws and Treaties of the World*, *supra* note 223, Item H-1, at 4 (Supp. 1971) permits (but does not require) member countries to limit the duration of protection for works of applied art and photographs to twenty-five years; the French copyright law prescribes a twenty-five year term for computer programs, Law of March 11, 1957, as amended July 3, 1985, Code civil art. 48. These abbreviated periods of protection may not matter very much in practice. In many instances, the commercial value of the work may not endure beyond one year. Moreover, if the work is updated, a new term will commence with each update (although the new term will apply only to the new matter in the compilation). See 17 U.S.C. § 103. As a result, there may be no single copyright term well-adapted to all low authorship compilations. One therefore chooses between endeavoring to adjust to the diversity of possibilities by implementing a plethora of terms, or maintaining uniformity by applying the single term governing all copyrighted works, whatever their subject matter. The former choice seems both impractical and unduly complicated. Although I advocate acknowledgement of a "two copyright" concept of authorship, it does not follow that the regimes of high and low authorship works must differ in every respect. When congruity can be maintained, so much the better, both for owners and users, and for courts called upon to mediate their disputes. Moreover, if a better and reasonably simple low authorship-specific durational rule cannot be designed, then rather than designating a different copyright term for the sake of difference, I would retain the general copyright term.

If one views the compulsory license device as an appropriate compromise when protection is desirable but other modes of protection (for example, contract) fail or prove too costly, then the license might best apply in those instances in which the provider seeks to make the information available to the public. That would include information disseminated in free-standing format such as hard copy, diskette, and CD ROM, as well as many varieties of on-line delivery. As a result, the license would replace contractual and self-help protections of the derivative works right once the compilation has been made available to the public. Arguably, had an information provider devised an effective means of extra-copyright protection, she might prefer her solution to the compulsory license. If the justification for the license rested solely upon its benefits to the information-gatherer, self-help measures might coexist with the license regime. But the license also serves the purpose of promoting public dissemination of new compilations based on the prior information. The license therefore is designed not only to provide compensation, but to eliminate control over derivative uses. Retention of extra-copyright control over rearrangements of disclosed compilations clashes with one of the license's goals.

By contrast, confidential or unpublished information should continue to be protected by copyright, but ought to remain outside the compulsory license domain. For not-yet disseminated compilations, and particularly for those still in gestation, imposition of a compulsory license undermines the general goal of encouraging creation and distribution of informational works because it would deprive the compiler of the opportunity to gain the advantage of releasing her information first.²³³ For works never intended for public disclosure, such as confidential customer lists, a compulsory license would defeat the trade secret purpose without offering a substantial countervailing social benefit.²³⁴

233. See, e.g., Breyer, *supra* note 164, at 290. Cf. *International News Serv. v. Associated Press*, 248 U.S. 215, 239-41 (1918) (recognizing AP's right to publish nationwide the news it gathered); 17 U.S.C. § 115 (compulsory license for making phonorecords does not apply until copyright holder of music has authorized initial sound recording). Indeed, even copyright's detractors generally agree that the law properly protects the author's endeavor to be the first to publish her work.

234. The 1976 Act definition of "publication" may adequately correspond to the concept of publicly disclosed used here. The definition turns on the public dissemination of "copies," which in turn are defined as "material objects . . . in which a work is fixed." Informational works distributed on paper or on disk fit the definition. A data base transmitted by wire or by satellite may also be considered distributed in "copies": the transmission may lead to fixation of the data in "material objects" because the transmission will be "fixed" in a computer's memory, i.e., it will be "sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration." 17 U.S.C. § 101; see also Final Report of the National Commission on New Technological Uses of Copyrighted Works, excerpted in Copyright for the Nineties, *supra* note 141, at 166-68 (inputting program into computer's memory constitutes making reproduction of work). Alternatively, if the compiler is not the same entity as the on-line delivery service, publication occurs because provid-

3. *Modifying the 1976 Act: Rights Subject to the License.* — Once the subject matter to which the license applies has been defined, it is necessary to determine which rights under copyright the license should qualify. Since the copyright law already reaches substantial, competing reproductions of low authorship works (at least in those courts willing to consider such works sufficiently "original"), a compulsory license may not be needed to afford protection against these activities. Perhaps the compulsory license nevertheless would be desirable as a means to afford third parties the opportunity to create substantially similar, competing compilations. However, granting third parties compulsory, subsidized access to create duplicate works does not much further the "Progress of Science," and by depriving the first compiler of control over the core copyright prerogative of reproduction, does risk undermining the incentive to gather information. Therefore, as an initial proposition, the compulsory license should apply to the right to create derivative works, but not to the right of reproduction. For example, a producer could continue to obtain injunctive relief against a third party who might reproduce a data base by such means as "downloading" substantial portions of the collected information, thereby creating a substantially similar data base.²³⁵ By contrast, the compulsory license regime would deprive the producer of the right to prevent copying and reshuffling of data in the creation of a different data base. The compulsory license would include the right to make a full copy of the work as a prelude to extracting or reorganizing elements of the compiled information. The compulsory license would not, however, confer the right to sell, lease, otherwise transfer, or further reproduce that copy.²³⁶ By the same token, although the compulsory license would disable the first compiler from forbidding creation of derivative works, the third party could not simply copy and rearrange the data—she would still be re-

ing the data to the service could constitute an "offering . . . to a group of persons for purposes of . . . public performance, or public display." 17 U.S.C. § 101.

By contrast, information disclosed pursuant to a contract to a limited number of persons for a limited purpose may not be "published" under the 1976 Act. See, e.g., *National Research Bureau v. Kucker*, 481 F. Supp. 612, 614 (S.D.N.Y. 1979). Information obtained through on-line data bases such as LEXIS would, however, be "published": even if the subscription agreement limited the purpose for which data may be obtained, access to LEXIS is open to the public. Cf. *Columbia Pictures Indus. v. Aveco, Inc.*, 800 F.2d 59, 62-63 (3d Cir. 1986) (rental for purpose of viewing videocassette in booths accommodating four or fewer persons in store is nonetheless "public" performance because anyone may enter store and rent videocassette).

235. See, e.g., *Telerate Sys. v. Caro*, 689 F. Supp. 221, 228-30 (S.D.N.Y. 1988) (preliminary injunction granted on claim for contributory infringement by producer of computer program permitting users to download from plaintiff's data base).

236. See Stern, *Section 117 of the Copyright Act: Charter of the Software Users' Rights or an Illusory Promise?*, 7 W. New Eng. L. Rev. 459 (1985). Cf. 17 U.S.C. § 117 (entitling owner of copy of computer program to enter program in her computer's memory, to modify program, and to make back-up archival copies, but prohibiting further reproduction, sale, or transfer of such copies, apart from transfer together with original program).

quired to obtain the license.²³⁷

If the right of reproduction is to remain fully under the first compiler's copyright control, one must consider whether full copyright liability or the compulsory license should apply to the practice of "copying by reference" or "slipping"—that is, a second comer's indirect reproduction of a compilation by contacting persons listed in the first compiler's directory to inquire of them if the information is accurate and if they wish to be listed in the second comer's directory.²³⁸ Although this practice yields a competing directory, and some courts have held the practice to infringe,²³⁹ it does require more independent labor of the second comer than does mere downloading. Thus, the competitive advantage gained is less substantial than that obtained through outright reproduction. If the second comer is still taking a shortcut on the road paved by his predecessor, the journey is not completely toll-free. As a result, one might rank "slipping" as an activity more akin to creation of a derivative work than a reproduction. Therefore, rather than enjoining production of the "slipped" directory, one might, through the compulsory license, augment the second comer's tolls and direct that the increase be paid to the first compiler.²⁴⁰

But, if the compulsory license were to comprise "slipping," the dif-

237. Cf. 17 U.S.C. § 115 (although anyone may obtain compulsory license to reproduce nondramatic musical composition on phonorecord, simply reproducing composition without securing license is copyright infringement).

Of the several compulsory licenses already in place in the 1976 Copyright Act, see supra note 198, the compulsory license closest to the kind envisioned here is the "mechanical rights" license to produce sound recordings of copyrighted nondramatic musical compositions. 17 U.S.C. § 115. The law permits the beneficiaries of the compulsory license to rearrange the music to conform to the contemplated performance. *Id.* § 115(a)(2). This compulsory license thus enriches the corpus of musical works by making available to the public a potentially infinite number of arrangements of underlying compositions. On the other hand, the compulsory license to make sound recordings does not permit a would-be record producer simply to "dub" a preexisting recording of the musical composition; unless the interested parties agree otherwise, each compulsory licensee must create its own recording. *Id.* § 115(a)(1).

238. See, e.g., *National Research Bureau*, 481 F. Supp. at 614 (defining "slipping").

239. See, e.g., *id.*; *Jewelers' Circular Publishing Co. v. Keystone Publishing Co.*, 274 F. 932, 935 (S.D.N.Y. 1921) (L. Hand, J.), *aff'd*, 281 F. 83 (2d Cir.), *cert. denied*, 259 U.S. 581 (1922); see also *Northwestern Bell Tel. Co. v. Bedco of Minn., Inc.*, 501 F. Supp. 299, 302 (D. Minn. 1980) (discussing "slipping" but determining that liability need not rest on that basis alone because defendant also included in its query letters advertisements photocopied from plaintiff's Yellow Pages directory).

240. This conclusion only obtains, however, if the practice of "slipping" is expensive. That may be the case for print format directories, but seems less likely for digital format compilations. In the latter instance, a second comer may download the information, apply a "mail merge" program to supply query letters to all listed entities, and thereby indirectly duplicate the first compilation at rather little cost and effort. Moreover, failure to protect against "slipping" might discourage provision of information in readily downloadable, remanipulable formats. On the other hand, even print format directories may not prove expensive to "slip" if optical scanners can efficiently and accurately digitize the listings.

ference between this license and a compulsory license permitting simple reproduction seems purely formal. This observation prompts one to revisit the question whether the reproduction right in a low authorship work should also be subject to compulsory licensing, or whether the reproduction-derivative works distinction should be maintained by assimilating "slipping" to reproduction for imposition of full liability. On the theory that the social gains from open production of identical works are overshadowed by the disincentives to production that would follow truncation of the reproduction right, one might conclude that the compulsory license should apply only to the derivative works right. Empirical data might qualify this conclusion, however. For example, if policing the reproduction right proves so expensive that the lower returns from compulsory licensing in fact exceed the price of a negotiated license minus enforcement costs, a compulsory license might supply superior incentives to production.²⁴¹

4. *Rate-Setting*. — The determination that compilers should be compelled to license derivative works rights in published data bases and similar informational works does not address how the compensation for the license should be calculated. The general approach of the 1976 Copyright Act is to delegate the task of rate-setting to an administrative body, the Copyright Royalty Tribunal (CRT).²⁴² But compelled licensing need not be accompanied by specific price regulation. While compulsory licenses under the current statute generally perform two functions—making the work available to third parties and setting the price of exploitation—these two functions can nonetheless be disjoined. The copyright law could simply oblige copyright owners to license, but leave the calculation of compensation to the parties.²⁴³ Another alternative to the 1976 Act compulsory license provisions would direct the CRT to set a "ceiling" rate sufficiently high to allow for "bargaining room" toward the actual price.²⁴⁴ In other words,

241. In addition, "slipping" can supply a benefit beyond price reduction through competition. A directory produced by "slipping" may well prove more accurate than one simply copied. Indeed, this is particularly true if the first directory includes "seeds"—that is, false information planted for the purpose of detecting copying. On the practice of "seeding," see, e.g., *Business Guides v. Chromatic Communication Enters.*, 892 F.2d 802, 804 (9th Cir. 1989), cert. granted, 110 S. Ct. 3235 (1990) (No. 89-1500).

242. 17 U.S.C. §§ 801-10.

243. Cf. 17 U.S.C. § 116A, added to the 1976 Copyright Act as part of the Berne Convention Implementation Act of 1988, Pub. L. No. 100-568, 102 Stat. 2853, 2855 (1988) (negotiated license for jukebox performances of nondramatic musical compositions); see also 17 U.S.C. § 118(e)(1) (public broadcasting compulsory license provides for setting of terms and rates of royalties through voluntary negotiation between owners of nondramatic literary works and public broadcasters). In both these cases, however, the possibility of a CRT-determined rate acts as a default position to the parties' negotiations.

244. Cf. *Recording Indus. Ass'n of Am. v. Copyright Royalty Tribunal*, 662 F.2d 1, 11-13 (D.C. Cir. 1981) (rejecting "bargaining room theory" of rate setting for § 115 mechanical rights license, inferring from statutory direction to CRT to afford copyright

rather than setting "the" rate, the CRT would stipulate "a" rate, to serve as a basis for negotiation between providers and users.

There are advantages to the "bargaining room" approach over specific rate-setting. First, it allows for more "market" activity, and should prove more flexible than administrative rate-making. Bargaining room allows the parties to vary the rates to fit particular uses. Second, compelling bargaining, but leaving the terms to the parties, is particularly attractive when the elements of the price formula may be multiple and complex. For example, a data base "remanipulator" may be extracting and rearranging information from a variety of data bases in varying degrees. Ideally, the rate paid should reflect the relative reliance on each source. This question may be so fact-specific as to elude satisfactory treatment in an omnibus setting of "the" rate. Third, because it is easier to enunciate general guides than specific prices, CRT rate-making proceedings might therefore prove less cumbersome and artificial.

These advantages may be better realized in a system of compelled licensing without any administrative rate-making. After all, maintaining some form of CRT rate-making still requires government determination of a (albeit not "the") price. This determination is not easy: if the price must be high enough to induce bargaining by users, it must also be low enough to induce bargaining by copyright owners.²⁴⁵ Moreover, the height of the ceiling may depend on the volume of use; the greater the volume, the lower the ceiling can be. But information concerning volume of use may be unknown at the time of rate-setting. By the same token, the complexities of multiple data base copying by individual users make even the determination of a "ceiling" problematic. There may not be enough uniform practice among users of informational works to permit the kind of extrapolation needed for industry-wide rate-making.²⁴⁶

If elimination of administrative rate-making altogether would produce better-tailored compulsory license prices in theory, it remains necessary to ensure that, in practice, copyright owners will license their works. Without the CRT, one may fear that nothing will induce the copyright owner to propose a reasonable price or even to negotiate. In effect, the absence of any CRT rate-making could drain the compulsion

owners "fair return," that CRT is to set "the" rate, and not merely "a" rate which might serve as basis for inter-industry negotiation).

245. Certainly, the "ceiling" must be lower than the cost of independent generation of the data; how much lower is the problem.

246. Moreover, experience indicates that, over time, "ceiling" rates may fall below fair compensation. For example, the 1909 Copyright Act set a two-cent rate for the mechanical recording compulsory license. At the time, that rate may have afforded considerable bargaining room; by 1976, when the rate was finally revised, most authorities agreed that the rate failed adequately to remunerate copyright owners of musical compositions. See, e.g., *Recording Indus.*, 662 F.2d at 4. But see 17 U.S.C. § 804 (providing for CRT revision of rate every five or ten years, depending on license category).

from compulsory licensing. But there are other means to induce copyright owners to license. The law could direct the owners to negotiate, and entitle the frustrated would-be licensee to seek judicial determination of a fair price for the proposed use. This mechanism is already in place in a related context: under the antitrust decree governing the activities of ASCAP, one of the voluntary collective licensing entities for music performance rights, a user dissatisfied with the blanket license rate demanded by the collective may obtain a judgment reviewing the rate and, if appropriate, designating a new rate.²⁴⁷

Alternatively, the law implementing the compulsory license could require the parties to submit to compulsory last-offer arbitration should they fail to reach agreement within a designated period. Under this kind of arbitration, the buying and selling parties would set forth a single final offer figure; the arbitrators would select one or the other. In theory, at least, both parties would present reasonable figures because the submission of a grossly variant sum probably would lead the arbitrators to select the other side's offer.²⁴⁸ Whether the impetus for licensing comes from the prospect of a judicial or arbitrated price determination, if information providers are indeed obliged to license their published data, they should eventually form licensing collectives capable of devising a variety of pricing policies adapted to the different kinds of derivative uses made of the data.²⁴⁹

247. See generally Garner, *United States v. ASCAP: The Licensing Provisions of the Amended Final Judgment of 1950*, 23 Bull. Copyright Soc'y 119, 126-27 (1976) (explaining ASCAP licensing provisions and judicial rate-setting of licenses); Timberg, *The Antitrust Aspects of Merchandising Modern Music: The ASCAP Consent Judgment of 1950*, 19 Law & Contemp. Probs. 294, 307-08 (1954) (judicial fixing of reasonable rates under antitrust decree).

The federal district court for the Southern District of New York has jurisdiction over ASCAP licensing rate disputes. See Garner, *supra*, at 119.

248. Cf. Statement of Professor Henry Geller Before the House Subcommittee on Communications on Pending Proposals to Revise the 1984 Cable Act (Mar. 29, 1990) at 8-9 (on file with Columbia Law Review) (recommending modification of FCC regulations under § 612 of Cable Communications Act of 1984, Pub. L. No. 98-549, 98 Stat. 2779 (1984), to remit parties to compulsory last offer arbitration for determination of rate at which cable systems grant leased access to material to certain other cable programmers: "By using the last offer technique, the process most closely emulates the marketplace, and avoids having the FCC regulate the rates or terms, a most difficult matter as experience with the Copyright Royalty Tribunal [sic] has shown.").

An arbitration scheme should be consistent with the Constitution's limits on allocating the judicial functions of article III courts. In *Thomas v. Union Carbide Agric. Prods. Co.*, 473 U.S. 568, 594 (1985), the Supreme Court upheld against an article III challenge a statute providing for binding arbitration of disputes regarding payment for use of data submitted to the Environmental Protection Agency if the parties failed to agree on compensation. The arbitrator's decision was subject to judicial review only for fraud, misrepresentation, or other misconduct; the compensation figure was not itself reviewable. *Id.* at 573-74.

249. Cf. Note, *New Technology and the Limitations of Copyright Law: An Argument for Finding Alternatives to Copyright Legislation in an Era of Rapid Technological Change*, 65 Chi.-Kent L. Rev. 307, 330-39 (1989) (recommending voluntary licensing of

5. *Other Issues.* — I have tried to outline the general contours of a system compelling collective licensing of derivative rights in fact compilations. Many questions remain, but their treatment requires a degree of detail inappropriate to the broad scope of this Article. Nonetheless, it is worth at least signalling the kinds of questions one might address were one implementing this kind of compulsory license. Some of them are empirical: for example, how well would arbitration, or resort to a court, work? One might contend that the threat of judicial or arbitral rate-making has some force, but only so long as the parties do not make a regular practice of seeking review. If in other collective license domains this has not been the practice,²⁵⁰ why is that so, and would the same reasons apply to information providers and users?

Other questions concern organization of the distribution of the sums collected under the compulsory license: On what kinds of units would payment be based? Would the units correspond to “bits” of digitized information? To individual data (however defined)? To individual works? How would one determine the frequency of licensees’ use

rights in home taping and similar new technological domains, but without exploring how copyright owners will be led to “volunteer” to license rights).

The compatibility of the proposed compulsory license qualifying the derivative works right with United States obligations under the Berne Convention warrants brief consideration. (I will address the international and comparative law aspects of protection of works of information more fully in a forthcoming article.) The Berne Convention’s adaptation right, art. 12, is not explicitly subject to qualification by compulsory license. See Berne Convention For the Protection of Literary and Artistic Works, Sept. 9, 1886, art. 12, in *Copyright Laws and Treaties of the World*, supra note 223, Item H-1, at 6 (Supp. 1971). However, art. 9.2 of the Convention allows for imposition of certain restrictions on the reproduction right and may support the kind of compulsory license proposed here. See *id.*, art. 9.2, Item H-1, at 4–5. Arguably, the license would not “unreasonably prejudice the expectations of the author,” in violation of art. 9.2, because, as a practical matter, without the license the author would have little expectation of receiving any compensation.

In any event, fact compilations may not be protectable under the Berne Convention. The kind of compilations Berne covers are “[c]ollections of literary or artistic works . . . which, by reason of the selection and arrangement of their contents, constitute intellectual creations.” See *id.*, art. 2.5, Item H-1, at 1. Not only does the Berne Convention set forth a personal authorship standard for protectable compilations, its inclusion of the term “collections of . . . works” appears to eliminate mere collections of information from the scope of the definition.

Although Berne may not compel protection for fact collections, if a member country elects to protect them, the question arises whether it must protect them to the full extent set forth in the Berne Convention. Cf. Note, Committee of Experts on Model Provisions for Legislation in the Field of Copyright, 25 Copyright 146, 149–50 (1989) (addressing international protection of sound recordings—works United States considers copyrightable, see 17 U.S.C. § 102(a)(7)—but which are not included in Berne Convention). There appears to be no consensus concerning application of Berne protections to subject matter excluded from the treaty.

250. Historically, music users have but rarely sought a rate-making from the Southern District of New York pursuant to the ASCAP consent decree. See S. Besen & S. Nataraj Kirby, supra note 208, at 25–26; Garner, supra note 247, at 127–28.

of the various providers' units?²⁵¹

Finally, the premise upon which the proposed compulsory license rests is itself subject to disproof. The kind of compulsory license for which I have argued shares most of the characteristics of a voluntary collective license, except that participation in the licensing collectivity would be compulsory. I have advocated this solution of compelled collective licensing because of the concern that information providers might not otherwise afford all who seek to rearrange compiled data open, non-exclusive access to the entirety of published compilations. Were that concern to prove unfounded, private regulation of the derivative works right through voluntary collective licensing should achieve the same goals as the proposed compulsory license.²⁵²

CONCLUSION

In his 1903 *Bleistein* decision,²⁵³ Justice Holmes paired the personality and commercial value concepts of copyright. Indeed, in declaring that individuals are "not free to copy the copy"²⁵⁴ of an original object

251. Collective licensing of the public performance right in nondramatic musical compositions does not provide a perfect analogy to the compulsory licensing of derivative works rights in informational works. Two salient differences concern the heterogeneity of informational works and the difficulty of measuring use. The first difference may be more apparent than real. It is true that informational works may contain more or less data, which may be differently valued, and that different users may be working with different quantities of data from the same compilations. By contrast, a broadcaster performs a song, a readily identifiable unit. Nonetheless, just as data may be recycled in different quantities, songs may be of different lengths, and a "Number 1" hit has a different value than a song languishing at the bottom of the charts. The second difference is more troublesome. Performing rights societies employ surveys of air play of songs to determine which works have been performed, and with what frequency. See generally S. Besen & S. Nataraj Kirby, *supra* note 208, at 21 (discussing the methods used by ASCAP to determine how often its members' works are being performed); Kernochan, *supra* note 217, at 392-93 (describing methods of monitoring performances and distributing fees). There may not be such a readily identifiable, external measure of use of data. However, similar problems have confronted the Copyright Clearance Center, the collective licensing agency for photocopy rights in scientific and research books and journals, and the CCC has devised some solutions. The CCC has developed statistical models of frequency of use by compiling information provided by the users respecting the works they photocopy, and by estimating the nature and quantity of the photocopying in which specific industries engage. See generally S. Besen & S. Nataraj Kirby, *supra* note 208, at 49-51 (discussing three models of sampling used to determine annual photocopying).

252. Even if all compilers participated in voluntary licensing collectives, one might fear that their combined monopoly power would yield excessively high rates. But the ASCAP consent decree, see *supra* note 247 and accompanying text, illustrates the means, short of compulsory licensing and agency rate-making, to promote pricing policies that users may find reasonable. See also S. Besen & S. Nataraj Kirby, *supra* note 208, at 64-75 (discussing oversight of copyright collectives in other countries).

253. *Bleistein v. Donaldson Lithographing Co.*, 188 U.S. 239 (1903).

254. *Id.* at 249 (citing *Blunt v. Patten*, 3 F. Cas. 763 (C.C.S.D.N.Y. 1828) (No. 1580) (navigation charts); *Kelly v. Morris*, 1 L.R.-Eq. 697 (1866) (address directory); *Morris v. Wright*, 5 L.R.-Ch. 279 (1869) (address directory)).

in nature because "[t]he copy is the personal reaction of an individual upon nature,"²⁵⁵ Holmes drew the personality model from the premise established by prior decisions securing compilers' labor and investment against slothful second comers. Earlier decisions had condemned copying the copy because the copying compromised the first author's laboriously earned property.²⁵⁶ Justice Holmes added the rationale that the copying also misappropriated some aspect of the author's personality. Later in the decision, he posited that the commercial value of the disputed work justified its protection.²⁵⁷ In effect, Holmes articulated alternative bases for copyright: a work may be protected because it embodies the author's personality; it may also be protected because it represents a commercial value from which a third party has sought, without permission, to benefit.

Since Holmes, the personality justification for copyright has enjoyed increasing vogue, to the detriment of the commercial value rationale. If courts still protect information, many do so apologetically, or disingenuously, recasting "sweat" as subjective selection and arrangement. The inhospitability of the personality concept of copyright to fact protection creates uncertain and inconsistent adjudication of claims involving low authorship works.

Copyright in informational works would be less problematic were United States copyright's dual basis for protection—comprising both works of high and low authorship—acknowledged and restored. Copyright concerns both the original personal imprint of the author upon the work, and the original investment of labor and resources. My proposal would not replace one unitary copyright scheme with another; rather, it would recognize the diversity of copyrightable works, and would accord a level of protection commensurate with the nature of the interest at stake. The point at which low and high authorship works diverge would not be the securing of copyright status, but the organization of the scope of protection. The essential divergence concerns the administration of the right to create or authorize derivative works—works based on and incorporating portions of the initial work. Copyright owners of high authorship works would remain entitled to both compensation for, and control over, derivative works.²⁵⁸ The right to determine whether and how a derivative version of a high authorship

255. 188 U.S. at 250.

256. For example, in *Sampson & Murdock Co. v. Seaver-Radford Co.*, 140 F. 539, 542 (1st Cir. 1905) (quoting *Hogg v. Scott*, 18 L.R.-Eq. 444, 458 (1874)), the court declared:

The true principle in all these cases is that the defendant is not at liberty to use or avail himself of the labor which the plaintiff has been at for the purpose of producing his work; that is, in fact, merely to take away the result of another man's labor, or, in other words, his property.

257. 188 U.S. at 252; see *supra* text accompanying notes 88–91.

258. For example, the author of a novel would retain the right to authorize—or to decline to authorize—a motion picture based on the book.

work should be made, and by whom, is appropriate to these creations because the work embodies both personal and economic interests. However, when the work manifests no authorial personality, there is little point to securing interests that safeguard personal goodwill. The issues reduce to balancing the incentives necessary to stimulate the production and dissemination of low authorship works against the availability of these works for further development by second comers.

In its current stage of evolution, copyright law for low authorship works poses problems not because these works do not "belong" within its subject matter, but because the scope of protection afforded by the derivative works right may exceed necessary incentives to production, and therefore may unnecessarily curtail second comers' fruitful exploitation. Compelled collective licensing would substitute for the derivative works right in information compilations. The license would afford the first compiler compensation, but not control; the second comer could still take a ride on her predecessor's endeavors, but the ride would not be free. The availability of compensation should preserve, and perhaps enhance, incentives and may prove more attractive than the insecurity of litigating to obtain a higher return, or an injunction. The compelled licensing regime here proposed should reward the initial producer's investment of labor and capital while enabling subsequent compilers to exploit the information without incurring the deterring costs associated with independent generation of the same data.